

AN INTERNSHIP IN PUBLIC ADMINISTRATION

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by

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## PREFACE

The purpose of this diary and of the internship experience with Trans World Airlines, Inc., was to provide an increased understanding of personnel management within the specialized field of wage and salary administration in general and job evaluation in particular.

The program was designed to familiarize the intern with the fundamental techniques of job evaluation in general and that of Trans World Airlines in particular for the subsequent application of this skill in the establishment of an evaluation plan for Ethiopian Airlines.

This diary is presented as a result of eight weeks of intensive study, observation and application of job evaluation methods and procedures.

The diary is divided into three major parts. The first part, Chapters I through III, provides general information on the history of Trans World Airlines, its organization and departmental functions and personnel practices.

The second part, Chapters IV through IX, explains in detail the compensation program and the job evaluation plans of Trans World Airlines.

The third part, Chapters X and XI, is a report on the intern's experience during the eight-week training program and comparison of textbook theory and actual practice within the Trans World Airlines wage and salary administration.

The writer is greatly indebted to Mr. J. L. Brumit and Mr. Ijjigu Demissie of Ethiopian Airlines, and Mr. D. M. Young of Trans World

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## ABSTRACT

Compensating an employee for work performed or services rendered constitutes an important aspect of personnel management. The question of determining and establishing appropriate wages and salaries for comparable, different and varied jobs in an organization is one that raises complex, thorny and even nebulous issues such as "equity."

The eight-week intensive training of the intern was a considerable concentration on the basic and specific methods of determining the relative ranks of jobs on the basis of their contents as judged by certain defined job characteristics or factors.

In the early part of the internship program, the intern was acquainted with the basic philosophy and fundamental methods of job evaluation. The intern was subsequently introduced to the actual job evaluation methods as applied in TWA. Actual case problems and situations were studied; job descriptions were reviewed, audit of jobs were conducted; the intern had the opportunity of observing and participating in actual information collecting, verifying and recording process. The intern was acquainted with the techniques of compiling salary surveys and applying such information as a method of comparing internal salary structures with external market conditions.

The latter part of the program was largely a concentration on and analysis of job descriptions and organizational structures of Ethiopian Airlines. The study basically involved the understanding of the salary

structures of management personnel of Ethiopian Airlines, the investigation of the possibilities of translating TWA job evaluation methods, and the subsequent application of the methods employed by TWA to that of Ethiopian Airlines.

## CHAPTER I

### INTRODUCTION

The last decade has witnessed a revolution in air transport. In 1967 alone, U. S. airlines carried over 132 million passengers, 3.4 billion ton miles of cargo, obtained 6.9 billion in revenue, spent over 2 billion for capital items, and had more than 276,000 employees.<sup>1</sup> Undoubtedly, air transport has become a major American industry and the airlines have emerged as a powerful force in the economy.

Air transport is an ever-expanding industry and as such has created new jobs at an impressive rate. In the last few years, airline employment has expanded enormously. In 1967 alone, the airlines created 32,000 new jobs.<sup>2</sup> Its rate of investment in aircraft and related equipment has caused the creation of several thousand jobs among aircraft and component manufacturing firms.

The increase in airline operations has increased the airlines' wage and salary expenses as well. In 1967, total payroll amounted to 2.5 billion, thus representing 38.2 per cent of the total airlines operational costs.<sup>3</sup>

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1. Stuart G. Tipton, Air Transport Facts and Figures (Washington Air Transport Association of America, 1968), p. 4.

2. Ibid.

3. Ibid., p. 5.

How does an airline establish and administer its wages and salaries? How does it determine the "price" of a new job or a changed job? How does it maintain the often cherished "fair and equitable" pay among jobs and employees? What are the problems and issues involved in determining and maintaining rational pay structure in a dynamic enterprise like an airline? These are some of the issues that this paper attempts to raise and answer as far as possible.

The differentiation of two basic terms, wages and salaries, may be beneficial for the discussion presented in this paper. Wages is a term used to describe compensation for work performed by production workers. "It is a composite term which describes a whole group of practices-- hourly rates, piece rates, bonuses and premiums."<sup>4</sup> "Salary is a term used to describe compensation for work of supervisory, clerical and managerial employees whose contract stipulates weekly, monthly or annual compensation."<sup>5</sup> Although most of the principles discussed will apply to both, we will be primarily concerned with the compensation of the latter. The terms compensation, remuneration, or pay are used interchangeably as general terms to describe any kind of direct financial earnings an employee gets for work performed or services rendered.

Financial remuneration is probably the most important single element in conditions of employment. Accordingly, pay rates and conditions related to worker's earnings have always raised major issues between employers and workers. Money income represents purchasing power to the

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4. Charles W. Brennan, Wage Administration, (Homewood, Illinois: Richard D. Irwin, Inc., 1959), p. 3.

5. Ibid., p. 4.

individual. Since the days of the Industrial Revolution, there has been an increased dependency upon wages and salaries as a means of deriving purchasing power. It has been claimed that wages and salaries represent the only purchasing power for more than three-quarters of the American labor force.

Wages and salaries as the determinants of the purchasing power of individuals poses problems from sociological points of view as well. The standard of living of an individual belonging to a given community is established by the amount of pay he receives. His standard of living, in turn, establishes his social status in the community. Because the level of pay affects an individual's prestige among his peers and the community in general, he intends to increase his material wealth and his social level in times of prosperity and maintain steady income and his established social position at times of recession.<sup>6</sup>

These stated objectives may be an oversimplification of the complexities of human behavior and needs. There are incongruities between and divergences from these aims which complicate pay determination and administration. Some individuals are satisfied with low wages and salaries and more leisure; others demand only a higher scale of living. Some are more interested in the challenges and demands that work provides, i.e., they are more concerned with the kind of job they perform than with the amount of pay received.

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6. Ibid., Brennan, p. 5.

Nevertheless, financial remuneration still constitutes an important part of the working condition to the individual concerned. From the employer's point of view, success in business would mean keeping operational expenditures, including pay, within certain financial limits.

On the other hand, however, the amount of pay determines, to a large part, the type of labor force a company is able to recruit. It thus imposes a requirement that pay must be sufficient enough to attract personnel of desirable calibre. The pay administration program will be forced to reconcile this apparent contradiction in the two-fold objective of the employer. The lowest unit cost is not necessarily achieved by the least expensive labor force.

A modern business enterprise needs a wage and salary program, if only as an administrative device, simply because paying large numbers of workers necessitates some kind of rules.

Failure to develop and install a program in a well-defined fashion is almost certain to result in the long run in increased expense, employee dissatisfaction, poor productivity, high turnover and other problems throughout the enterprise.

A modern industrial society, too, cannot avoid being involved in the general problem of pay determination. Government has taken certain legislative measures governing some aspects of working conditions and has shown its concern about pay and pay determination. Indeed, in an economic society like the United States, some controls over the level of pay have sometimes become necessary to prevent undesirable conditions of inflation. Government is also concerned with the problems of wage and

salaries, inasmuch as these affect international trade, since wages and salaries can get so high that they place the country's competitive capacity in an unfavorable situation in international markets.

Although pay administration is not a new subject, the rapid rise of large and involved industries after the Industrial Revolution has made it reach new heights of complexity. Wage and salary differences occur at various levels. They exist between countries, within each country, between industries, within an industry, within a firm and between departments of a firm. Many of these differences often exist and reflect differences in occupation or jobs. But also, however, inequities in pay rates may occur for any number of reasons.<sup>7</sup> Promoting individuals or groups of individuals to jobs of higher level having more responsibility without sufficient increase in pay, demoting without corresponding reduction in pay, favoritism and special rates for seniority, failures to pay all employees, including women, "equal pay for equal work", underpayment for the physically handicapped people, union pressures from both within and without the enterprise, may cause inequities and throw some jobs out of line when compared with others.

The problem of defining and establishing suitable and acceptable pay relationships between groups of jobs and workers has become one of considerable importance in both the theory and practice of pay determination.

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7. Ibid., Brennan, p. 4.

Techniques of job evaluation have been developed and applied over the years to deal with the problems of comparative equity in pay determination. Its purpose has been to provide a device for constructing a wage and salary structure that is acceptable to both the workers and employer; a wage and salary structure that is fair and equitable--at least in the sense of ensuring equal pay for jobs demanding broadly comparable efforts from the incumbents; a system that rewards properly the greater efforts and hardships involved in some jobs as compared with others.

Job evaluation is a relatively new approach to pay determination. It has been applied rather widely in some industries, but very little in others. It has gained popularity among various industrial enterprises, and it has also been subjected to severe attacks on a variety of grounds. Its basic philosophy is simple, but its practical applications often involve complex technical issues.

Thus, the principal purpose of wage and salary administration will be the integration and harmonizing of these many and divergent objectives and factors by fair and systematic considerations of the political, economic, psychological and sociological issues and by consideration of the interests of all--society, the government, workers and the employer.

This paper will largely be devoted to a description of the aims and methods of job evaluation. Concrete examples and elaborate information based on actual Trans World Airlines experience with job evaluation plans; technical details involved in establishing and operating job evaluation systems for Ethiopian Airlines will also be discussed. Statements and discussions concerning the merits and drawbacks--the problems

and criticisms in the use of job evaluation as an aid in pay determination are also points of interest to be mentioned in the final pages of the paper.

### The Historical Background of Trans World Airlines

The history of Trans World Airlines is partly a reference to the history of man's continual struggle to conquer and master his environment. Ever since Wilbur and Orville Wright achieved the breakthrough in air transport by the invention of an airplane, man has made subsequent impressive advances in the development of air transport with respect to speed, safety and ability to transport to far away places. Man's imagination of a vehicle that carries him higher, faster, farther and safer and his endless effort to realize such a dream reached new and dramatic heights on the incredible achievement of man's landing on the moon recently.

Thus, the invention of the airplane was not only a technological achievement, but its impact on human civilization as a mode of transport has also been all encompassing, realizing the fact that global air travel has dramatically changed the world's topography, shrinking continents and narrowing oceans.

Air transport generally provides facilities for passengers, mail, express and freight. Air service has undergone considerable growth and enormous improvements since its early days in the 1920's. Within the last half century, air transport has become a major industry of the world.

The development of air transport in the United States really began in 1924 when the air mail service inaugurated the first scheduled night flights along a lighted airway. In those early days, mail transport

service was the major business, and passengers could fly subject to availability of space depending on mail load.

Yet the true shape of international air transport was to come in May, 1927, when Charles Lindbergh crossed the Atlantic in a non-stop flight from New York City to Paris. This and other subsequent pioneering flights produced far-reaching consequences. It stimulated American business initiative; businessmen foresaw unlimited traffic volume and profits. Soon investment soared, and organizations were established to acquire and combine efforts of groups of independent airlines and aircraft engine manufacturers. Impressive growth in airline passenger, mail and cargo traffic increased business volume to a greater magnitude.

The history of TWA is the history of air service in the United States.<sup>8</sup> Western Air Express, the first parent company of TWA, was organized in 1925 and started operations in 1926 between Los Angeles and Salt Lake City. It was engaged primarily in air mail services, as among the few carriers, which were awarded the first original contracts by the United States Post Office Department. At about the same period, when many small airlines were organized to provide freight as well as passenger services, two other TWA parent companies were formed in Los Angeles. One such company was Standard Airlines, operated as a subsidiary of the Aero Corporation of California, and the other was Maddux Airlines, which specialized in passenger flight between Los Angeles and San Diego. The fourth of TWA's parent companies, Transcontinental Airtransport, Inc.,

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8. Information on the history of TWA is based on: Ralph S. Damon, "Nearly Three Decades in the Air," Trans World Airlines, Inc., 1955, pp. 2-15 (mimeographed).

was created as a coast-to-coast passenger service. It was this air company that launched the first air-rail transcontinental service in July, 1929. Passengers flew by day and rode the railroad by night. The trip time was forty-eight hours.

A year of mergers arrived in 1930. The pioneer predecessors on the West coast, Western Air Express and Standard Airlines, merged; Transcontinental Air merged with Maddux Airlines. Soon the two companies, i.e., Transcontinental and Western Air, merged to be known as TWA.

In October, 1930, the company inaugurated the nation's first all-air transcontinental service with an overnight stop at Kansas City, reducing the total trip time to thirty-six hours. Within two years, with increased experience in night flying, the stopover at Kansas City was eliminated and the transcontinental trip time was cut down to twenty-four hours. By about 1933, with the introduction of DC-3 aircraft series, coast-to-coast flying was reduced to sixteen hours, and by 1940, with the introduction of Boeing 307, coast-to-coast time was reduced to fourteen hours. Today the same trip is made in five hours, with more than six daily flights (New York - Los Angeles) operated by TWA alone.

International operations started to take shape after two decades of pioneering air service in continental United States. On February 5, 1946, TWA inaugurated its international routes, with the first commercial flight from New York to Paris, with thirty-six passengers--the largest number ever to span the Atlantic in a single aircraft. By 1950, TWA air routes extended over the Atlantic, across Europe, the Middle East and some parts of Africa and Asia.

It was about this time that the company's name was changed to Trans World Airlines--TWA--still keeping its previous name. The present name dramatizes its international operations. Gradually TWA pushed its network around the world and the Award of Transpacific route<sup>9</sup> on April, 1969, boosts to sixty-seven the number of major centers in the U. S., Europe, Africa, and Asia served by TWA, including forty U. S. cities, with a total of 59,424 miles of unduplicated route. With this, TWA is now the world's ninth airline operating around the world, and the only airline with both extensive routes within the United States and around the world. This large domestic and international network operation makes TWA unusual, if not unique. All other major U. S. airlines are mainly, if not entirely, either domestic or international carriers. United Airlines, the world's largest airline, operates an entirely domestic network, including Hawaii. Pan American Airways, on the other hand, is almost entirely international with the exception of a route which became domestic when Hawaii acquired statehood.

Today TWA operates all pure jet equipment on U. S. domestic as well as international routes. It currently operates 225 of them with more than forty-five on order, the latter include Boeing 747, SST and Concorde.<sup>10</sup>

TWA has non-airline operations as well. It acquired the Hilton International Company by merger in 1967. Hilton, operated as a wholly-owned subsidiary of TWA, operates 44 hotels in 27 countries, engaging

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9. Via Hawaii, Guam, Okinawa, Taiwan--links California and Hong Kong.

10. Boeing 747--4 engines, 600-plus mph, 363-447 passenger capacity; Concorde (British-French venture)--4 engines, 1450 mph, 135-145 passenger capacity; SST (Supersonic Transport)--4 engines, 1800 mph, 300-350 passenger capacity.

some 22,000 employees. TWA's other non-airline operation is ground support services provided for the Apollo project at Kennedy Space Center in Florida.

The following chapter briefly discusses the TWA current organizational set up and departmental functions.

## CHAPTER II

### ORGANIZATION AND DEPARTMENTAL FUNCTIONS

An airline designs and establishes its organization to accomplish the same results as required by all business enterprises, i.e., maximum productivity with minimum cost and effort. Obviously, the character of the organization varies according to the size of the company, personnel qualifications, its products or services and many other factors.

In the early days of air transport, an airline often consisted only of an airplane or two, a few mechanics, a few pilots and possibly a manager. The manager, however, in addition to his managerial duties, often worked as a pilot or mechanic. Even today it is claimed that this trio of "airplane--mechanic--pilot" forms the basic functional operation and requirement of any airline, and all other functions performed by a large number of airline personnel are considered as supporting services. Such a consideration, however, is an oversimplification of the intricately interwoven and interdependent operation of an airline. Its functions of marketing, customer and public relations, engineering and personnel services cannot be considered less important in view of the fact that each activity involves an aspect that improves or maintains the overall operation. Without a productive sales department, an airline might soon operate empty airplanes destined for bankruptcy. Without the assistance of an engineering department, the choice of a wrong aircraft can bring a company to financial disaster.

Appendix A shows the corporate organization chart of TWA. The chart represents TWA's current organizational set up. It will be of some interest to briefly outline the functional responsibilities and divisions of the various departments in TWA.

The company's chief operating officer has the line divisions reporting directly to him. They include: (See Appendix A-2)

Flight Operations: This department is responsible for direct flying operations as well as all plans, procedures, pertaining to safe and efficient operation of aircraft, including flight dispatch, meteorology, crew scheduling, crew assignment patterns, detailing flight crew requirements, work standards, aircraft routing, evaluating new flight systems, and administration of cock-pit crew contracts.

Marketing: This department is concerned with marketing planning, advertisement and sales promotion, sales and service programs to generate business from available range of sources, including business, manufacturers, travel agents, other airlines, freight forwarders, Railway Express Agency, government agencies, military and selected foreign government agencies.

The division processes reservations, ticketing, and provides services to passengers and shippers both inflight and on the ground; prepares meals in company operated flight kitchens. (See Appendix A-3)

Technical Services: As aircraft require more continuous inspection and maintenance than any other transport vehicles, the Technical Services Department, located at Mid-Continental International Airport, in the outskirts of Kansas City, Missouri, is responsible for this activity.

Nearly 7,000 employees perform maintenance and overhaul, purchasing, engineering work, flight test and inspection.

The Maintenance and Overhaul Division overhauls, modifies and performs major maintenance work on TWA aircraft. At regularly scheduled intervals, all planes are overhauled, inspected and checked out inflight to ensure mechanical operations.

The Purchasing Division acquires all equipment, parts and supplies except food items and new airplanes--all ground and shop equipment, office machines, raw materials and passenger service equipment supplies. It plans, purchases and maintains all items needed to service the TWA fleet.

The Technical Development Division provides engineering, flight test and inspection services, through the development of technical standards pertaining to maintenance, overhaul, modification and operations of aircraft and systems. It conducts studies on design, metallurgy, communications and aircraft performance.

Operational Planning: The expanding growth of TWA requires a continuous building program of offices, terminal buildings, hangars and shops. This section is responsible for the plans and designs and operations of these facilities.

Corporate Staff: Each of the above-mentioned departments is considered as line operations. They have also staff functions which deal with the development and installment of policies and procedures governing the objectives and operations of the concerned department.

In a highly complex, big business organization like TWA, line functions cannot effectively operate by themselves alone. They need

other major departments that provide supporting services. Major departments which provide staff assistance include:

External Affairs: This is a department which projects favorable corporate image to the public, stockholders and employees. It works with the Airtransport Association of America and the International Airtransport Association on traffic and tariff policies and programs, negotiates company position on industry agreements, monitors competitive marketing and service practices, interprets the legislative, regulatory, policy making and contractual activities of U. S. and foreign governments that have bearing on TWA's business, handles all legal aspects of company activities, offers counsel, opinions and suggestions. It conducts public relations to create support from local communities.

We have mentioned that TWA performs a wide variety of services in addition to operating its own airline. TWA provides management and technical assistance services for some foreign airlines. At present it serves Ethiopian, Saudi Arabian and Trans Mediterranean Airlines--all designated as associated airlines. Such services had been extended to Lufthansa (German), Alitalia and Philippine Airlines. TWA also provides all building, engineering and medical services, maintenance and upkeep of the Kennedy Space Center project in Florida. It is the External Affairs Department that deals with matters related to such affairs. The department is also responsible for providing advice on types of activity and business diversification, evaluating requests for bids, negotiating contracts and projects. (See Appendix A-4)

Industrial Relations Department: This department is engaged in compensation and organization planning, development of employee benefit programs, personnel research, personnel development and labor relations-- including contract negotiations, grievances and arbitrations. It provides medical services, including physical examinations of new personnel, regular re-examination for flight crew personnel, utilization of handicapped employees, administration of preventive medical programs and safety engineering.

Finance: This department is the custodian of the company funds, securities, and financial instruments and investments. It develops and administers tax and insurance programs, other than Group Insurance and Retirement Plans. It formulates policies for financing both short and long term capital needs. It plans the terms for acquisitions on major capital items such as new aircraft and terminal facilities. It accounts for and controls corporate resources. It is concerned with budget preparation, financial analysis, preparation of financial statements and statistical reports that reflect accomplished results in comparison with established plans.

It audits all corporate facilities, financial procedures and records and administers a program of security to protect company and customer property.

It coordinates the development of all computer systems for designing and establishing integrated management information system within the company. It processes all required and desired data. (See Appendix A-5) TWA financial information is shown in Appendix B.

Training: TWA does not have a centralized training program. Instead, most departments are responsible for the continued development of higher skills of their respective employees.

Training of pilots is performed mainly at Jack Frye International Training Center, occupying an eight-story building in Kansas City, Missouri. Close to 7,000 flight crew and station personnel are trained each year in a variety of technical and service oriented courses under simulated and actual conditions.

Technical services training is performed at TWA's overhaul base in Mid-Continental International Airport in Kansas City, in Paris and at major maintenance bases in the United States. Because of the introduction of new airplanes, modifications to aircraft systems and desire to insure high standards in maintenance, technical services training becomes a continuous process. All personnel who work on airplanes and aircraft systems, from new mechanics, who need indoctrination and basic training, through engineers and foremen, receive intensive training.

All salesmen, reservation agents, ticket sales agents from all over TWA Airline Operations attend classes in the central Sales Training School in New York. All new entrants learn reservation, ticketing, salesmanship and customer relations and experienced employees return for recurring refresher training to increase their proficiency. The Marketing Department provides management training for most of the other departments as well.

Well in advance of introduction of new airplanes, instructors (in flight and ground school in particular) undergo intensive training

by manufacturers. On lesser changes, such as aircraft system modifications, manufacturers may send representatives to help on training programs.

These are some of the company-operated training programs. But TWA has also a plan to help employees to advance their knowledge in general and specific skills in particular. It has an Education Assistance Plan, where TWA pays a maximum of \$300 per year for tuition for those interested in advancing their education, as a means of improving on-the-job and updating of skills related to present or prospective duties with TWA.

TWA, as a participant in the National Merit Scholarship program, grants four-year college scholarships to selected high school seniors whose parents are TWA employees (children of retired or deceased employees are also eligible to compete) for a maximum benefit of \$6,000, for the four undergraduate years.

TWA also has college contributions plan. In this plan, it matches an employee's donation to a college up to a maximum of \$250 each year as part of an aid program to higher education. It matches contributions to any accredited college or university or association or fund whose objective is the collection and application of funds exclusively for the benefits of colleges.

## CHAPTER III

### PERSONNEL

Today TWA has a total of 61,922 employees<sup>11</sup> engaged in three different areas of operations: airline, Kennedy Space Center Project, and hotel services. Of these three operations, we are interested in considering only those engaged in airline activities.

Classification: The airline operation engages a total of 37,377 employees. At least five categories of personnel can be identified: contract (union representation), non-contract/non-management, management, part-time seasonal, and employees assigned to associated airlines.

Contract employees constitute a total of 21,972, and they are represented by at least six different unions. The following are the various union groups and the number of employees in each union group:

Pilots and flight engineers	4,171
Hostesses and pursers	4,499
Teletype operators and switch center operators	363
Flight dispatchers	63
Meteorologists	18
Mechanics, food servicemen and guards	<u>12,858</u>
	21,972

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11. Trans World Airlines, "Monthly Headcount Record" (July, 1969), pp. 1-4.

Each of the above unions negotiates its working conditions, wages and salaries and other terms of contract with the company at different times.

The second group or category of personnel may be identified as non-contract/non-management. They are non-contract because they have no union representation and do not engage in collective bargaining for working conditions or any aspect of employment agreements with the company. They are non-management because they do not satisfy the requirements and do not fall within the company's definition of management functions. The bulk of these employees constitute reservation agents, ticket agents and secretaries, who form a labor force of a total of 9,262.

The third group of personnel may be identified as management employees, who make up a total of 4,627. They either perform administrative, supervisory or professional work. The classification criteria for this group of personnel will be discussed at length in subsequent chapters.

The fourth group are part-time or seasonal employees, numbering 1,075.

The fifth and last group are employees assigned to associated airlines, including Ethiopian, Saudi Arabian and Trans Mediterranean Airlines. There are 441 of such employees under contractual arrangements with each airline but still kept on TWA payroll. They are guaranteed re-assignment with TWA after return from overseas services.

The terms and conditions of work and other related employee-employer relations are governed by the various collective agreements signed with the different unions, for contract employees. All non-contract employees are governed by policies developed by management and

incorporated into the Management Policy and Procedure Manual. It is neither in the interest of this paper nor possible to discuss the personnel policies and programs pertaining to individual unions, non-union or management groups. Only brief statements of general nature may be desirable.<sup>12</sup>

Equal Employment Opportunity: TWA is committed to equal opportunity in employment for all persons without regard to racial, ethnic, age or religious considerations. Such a state of affairs is expected to exist in an organization engaged in international operations, as it employs individuals of many races, religions and nationalities. As a member of the National Alliance of Businessmen, TWA strives to pursue actions to insure equal employment opportunity.

Whenever vacancies arise, it normally places notices on company bulletin boards in given areas to attract interested and qualified personnel, and usually fills vacant positions by promotions within.

Working Hours: Most employees work forty hours in five days of each week. Whenever possible, employees have two consecutive days off out of seven. As air transport is a twenty-four hour operation, many employees work in the evenings and at night and days off are not necessarily on Saturdays and Sundays. Flight crews normally fly a designated number of hours during a given period.

Paid Vacations: After six months of service, an employee is eligible for vacation based on the number of months worked in the

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12. Trans World Airlines, "Employee Benefits" (mimeographed).

preceding calendar year. Vacations may be taken at any time during the year, subject to departmental schedules. Vacation due ranges from one work day for a month's service to twenty work days for fifteen and over years' service.

Holidays: There are eight paid holidays for office and ground employees in the U. S. Holidays that fall on Sunday are observed on Monday, and those on Saturday are observed on Friday.

Sick Leave: This accrues at the rate of one work day for each month of service up to a maximum of sixty days. Employees do not receive pay if they are absent due to illness during the trial period nor is any salary paid during the first three days of illness until employees complete three years of service, at which time pay begins on the first day of absence to the extent the employee has sick pay accrued, nor is sick leave pay available for pregnancy or illness related to pregnancy.

Other off-duty pay includes excuse from work up to three days for death or critical illness in the family and authorized leave for jury duty and military pre-induction examination.

Leaves of Absence: TWA recognizes personal, maternity, educational, military and medical leaves of absence. The following listing summarizes such leaves.

<u>Type</u>	<u>Service Requirement</u>	<u>Maximum Initial Leave</u>
Personal	6 months	90 days
Maternity	6 months	up to 1 year
Educational	1 year	up to 2 years
Military	none	up to 4 years
Medical	none	determined by Medical Services

In case of personal, maternity and educational leaves, re-assignment and return to duty will be subject to availability of position. In case of medical leave, reinstatement is provided for, seniority permitting. In case of military service, re-employment is in accordance with the provisions of the Federal law.

Pay: Apart from the base pay that is established for a position, there are other types of pay. Among them are overtime pay, pay for work performed in excess of eight hours on regular work days or regular days off, each having different rates. There is shift premium for ground personnel for work performed on a shift commencing between eleven A.M. and five P.M., five P.M. and six A.M. at different premium rates. There is holiday pay for work performed on any of the eight recognized holidays.

Other Benefits: Probably among the most attractive benefits that most airlines provide is free and reduced rate transportation. The Pyramids of Egypt, the Taj Mahal of India, the Tower of London, the Shrines of France, the Roman Forum, the Greek Acropolis, the Holy Land, the San Francisco Golden Gate, the New York Empire State, the Grand Canyon of Arizona, all and more are within the easy reach of an airline employee. Many are fascinated by such far away places, cultures, customs, that working for an airline becomes an exciting career. No other industry provides such travel opportunities to its employees. TWA carries its employees to three continents other than the United States. Off-line travel is made possible through other airlines by means of interline pass or reduced rate agreements. It will be of interest to further discuss these pass benefits.

The pass privilege is available to employees, spouse, employee's children (unmarried and under 21 years of age), natural parents, step-parents or foster parents.

The number of passes an employee is allowed each year increases with the length of service, until finally twenty years of service is reached, where there would be no limit on the number of trips made. On attaining the 20th anniversary, term passes are granted for employee and spouse, unmarried minor children or qualified unmarried dependent children over 21 years of age. Four trip passes are granted for parents, when spouse or children of employee hold term passes. Term passes are good for any number of trips and are valid for three years, whereas trip passes are good for passage between domicile and destination and valid for 90 days, except in cases when an employee terminates, in which case pass is good for 30 days.

The number of passes ranges from two after six months of service to ten for fifteen and over years of service until the 20th anniversary is reached. However, overseas travel has certain limitations. Trans-Atlantic passes are not available until completion of three years of service with the company.

Classes of Passes: Because passes are used on the airline for both business and personal matters, there are various classes of passes issued in order that those with more urgent need would be able to travel at a higher priority. Few passes are positive, i.e., where reservation can be made and travel confirmed. Most are non-positive, i.e., no reservations can be made and travel is subject to availability of

space, with possibilities of being deplaned at any one station, even after boarding. The passes are classified from 1 through 12, indicating the various levels of aircraft boarding priority. The lower the class number, the higher the boarding priority. Beyond the numerical breakdown, seniority determines boarding priority.

Passes in emergencies are provided in case of the death or serious illness in the family, on positive basis only on that portion of the trip. Passes are also given to retired employees, based on length of service. They are also given for those employees entering military service.

There are service charges for the pass privileges ranging from \$2 to \$18 and additional surcharge for First Class travel ranging from \$4 to \$20, depending on the number of miles travelled.

Furthermore, other pass privileges include purchase of unlimited passes at reduced rates after six months of service. It includes one-half of the regular fare on the same basis as any revenue passenger. Trans-Atlantic trip tickets are purchased at one-quarter of the regular fare.

Stock Purchase Plan: The Plan is set up to provide opportunity for eligible employees to become stockholders, after two years of completed services or one year of service, if employee is over thirty years of age.

Salary deductions are made from a minimum of one dollar to a maximum of five per cent, or \$150, whichever is smaller. The company contributes 25 per cent of the amount an employee invests in the stock.

Thrift Plan: This is a savings plan where employees may contribute up to ten per cent of pay each month and the company adds an amount

equal to 25 per cent of what the employee saves for the month. The plan is designed for non-contract employees, not contributing to the Employee Stock Purchase Plan.

Credit Union: This is a financial operation owned and run by employees. It provides savings returns on money deposited and makes loans to members. It is a multi-million dollar operation.

Group Insurance Plan: This is an insurance plan that provides financial benefits in time of illness, accident, prolonged disability or death, for employees and family members. The amount of contribution depends on amount of benefits desired.

Retirement Plan: This plan is designed to serve the financial needs of employees, after normal retirement age of 65. Employee contributes 2 per cent of the first \$4,800 of annual earnings and 4 per cent of earnings over \$4,800. The company makes substantial contributions to the Retirement Plan.

These, in brief, outline some of the employee benefits in TWA.

## CHAPTER IV

### WAGES AND SALARY PROGRAM

In the introduction part of this paper, we have pointed out the significance of financial remuneration to an employee as this represents his economic ability or determines his purchasing power. We also mentioned that this purchasing power is a status symbol inasmuch as it determines his social position.

The complexities of compensation administration in a modern business and the problems which such state of affairs poses to management has been widely recognized. Wherever the employee-employer relationship exists, some sort of wage and salary program cannot be avoided, and indeed this program becomes an integral part of any activity of an enterprise. A salary program is important inasmuch as it contributes to a company's effort to attract and retain good quality employees, control turnover, reduce recruiting and training costs, reduce waste and increase productivity and contribute to the overall welfare of the employees.

Compensation Responsibilities in TWA: Employee Compensation represents a substantial part of the total operating costs of any business. In TWA, direct wages and salaries account for 39.2 per cent of the overall total operating costs in 1968.

TWA strives to maintain a fair and equitable compensation structure and to attract and retain desirable personnel by the establishment of a wage and salary division, which assumes the responsibility for the

development of compensation policies for non-contract employees.<sup>13</sup> The division consists of corporate staff group and regional field officers. The former develops policies, procedures, evaluates positions, determines general salary levels, makes statistical analysis, surveys and reports relating to company status and industry levels and practices in employee compensation. It develops company programs for local nationals in international division. It administers increases provided under all union agreements.

Regional offices advise cost center managers on particular problems. They serve as audit points for TWA salary administration. They insure compliance with salary administration regulations. They assist in job evaluation reviews of new or higher management positions. In overseas where local national personnel are employed, they recommend appropriate compensation levels. They provide guidelines to line managers regarding employees' merit increases or salary reviews.

We have pointed out earlier that union jobs (contract jobs) are negotiated by individual unions and the wage and salary program established by the process of collective bargaining and administered in accordance with agreed terms. The wage and salary division is involved only to the extent of insuring compliance with the union agreements. Our main concern for the rest of this paper will be non-contract jobs, which include management and non-management positions.

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13. Trans World Airlines, "Compensation Guide for Industrial Relations Personnel" (September, 1968), (mimeographed), p. 2.

Salary Classifications: TWA wage and salary program constitutes three broad classifications. They are:

(1) Contract Salary Programs: These are salary programs that are negotiated, established and administered by the process of collective bargaining and agreement by each individual union.

(2) Non-Contract/Non-Management Salary Program: This is a salary program that covers non-management jobs which have no union representation. The salary structure in force classifies these jobs into 14 salary grades ranging from 2 to 15, with 15 being the highest classification.

(3) Management Salary Program: This salary program is classified into three sub-categories:

Officers: This classification constitutes the compensation of corporate and staff vice presidents and other officers of the company. The salary classification is designated as A, B, C, D, the former being the highest classification.

Top Management: This is a salary program designed for senior management jobs. The salary classification is divided into eight salary grades, each salary grade being identified with Roman Numerals. Grade I is the highest, and Grade VIII is the lowest of the classification.

Middle and Lower Management: This is a salary classification that includes all management jobs not included in any other classification. The classification recognizes eight salary grades, each grade identified by Arabic numerals, ranging from 32 to 39, the latter being the highest classification.

The salary classification may be summarized in the following manner:

TWA NON-CONTRACT SALARY CLASSIFICATION

2-15	Non-contract/Non-management
32-39	Middle and Lower Management
VIII-I	Top Management
D-A	Corporate Officers

Salary Structure: Although the administration of individual salaries is largely the responsibility of line managers, the development and maintenance of the salary structures of non-management and management is basically that of the wage and salary administration division.

The non-management salary structure is basically a time progression structure, designed to enable an employee to progress with a range on the basis of his performance and length of service. It is established such that increases can be continued to the range maximum on a definite time schedule. The management salary structure is basically the same except that it is designed to permit increases on merit basis, and thus an individual level of pay purely depends on level of performance.

TWA salary structure has certain characteristics that are worth identifying. It has a salary schedule which shows a group of salary ranges of increasing value. Each range has a dimension, which is the spread between the minimum and maximum of a range. It has differentials, which is the difference in pay between different job levels. It has an overlap, which is the amount of common dollar range that exists among two salary ranges. The following table is a hypothetical case that

may illustrate these terms more clearly.

TABLE I  
HYPOTHETICAL SALARY SCHEDULES IN \$ AT MONTHLY RATES

Salary Grade	Minimum	Standard	Maximum
1	600	750	870
2	650	820	950
3	710	900	1,050

The dimension in the salary range is the spread between \$600 and \$870, i.e., a spread of \$270 in salary grade 1. The differential is the difference between levels of pay, i.e., between salary grades 1, 2 and 3 in minimum, standard and maximum--the difference between \$650 and \$600 in salary grades 2 and 1, and the difference between \$710 and \$650 in salary grades 2 and 3 for minimum salaries. The overlap is the amount of common dollar range, i.e., the standard and maximum of salary grade 1 is higher than the minimum and standard of salary grade 2 respectively. It thus creates room for common dollar value.

The range dimensions allow for the measure of experience in a non-management job and the measure of experience and performance in a management job. The overlap of ranges allows the company to pay an experienced and able person in a lower valued job equally with an inexperienced or less experienced man in a higher level.

TWA's non-management salary structure has decreasing differentials of from eight to four per cent between ranges. The ranges are about 3/4 per cent in length, i.e., the maximum is 3/4 per cent of the range

minimum. There is a considerable overlap between ranges.

TWA's management salary structure has a differential of about nine per cent between ranges. The ranges are about forty per cent in length. There is a bit of overlap here, too, but far less than the non-management structure. The obvious result is that the management structure is steeper than the non-management; in other words, it progresses at a faster rate.

## CHAPTER V

### JOB EVALUATION

Several definitions have been given to job evaluation, and we will present some of these typical definitions or descriptions. Job evaluation may be defined as:

An attempt to determine and compare the demands which the normal performance of particular jobs makes on normal workers without taking account of the individual abilities or performances of the workers concerned.<sup>14</sup>

Job evaluation is the process of analysis and assessment of jobs to ascertain reliably their relative worth, using the assessments as a basis for a balanced wage structure.<sup>15</sup>

Job evaluation is the evaluation or rating of jobs to determine their position in a job hierarchy. The evaluation may be achieved through the assignment of points or the use of some other systematic rating method for essential job requirements such as skill, experience and responsibility. Job evaluation is widely used in the establishment of wage rate structure and in the elimination of wage inequalities. It is always applied to jobs rather than to the qualities of individuals on the job.<sup>16</sup>

The aims of the majority of systems of job evaluation is to establish, on an agreed logical basis, the relative values of different jobs in a given plant or industry--the principles upon which all job evaluation, schemes are based is that of describing and assessing the value of jobs in firms in terms of a number of factors, the relative importance of which varies from job to job.<sup>17</sup>

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14. International Labor Office, "Job Evaluation" Studies and Reports, New Series No. 56 (Geneva: 1960), p. 8.

15. British Institute of Management, "Job Evaluation: a Practical Guide," Personnel Management Series No. 4 (London: 1959), p. 77 in I. L. O. Job Evaluation, p. 8.

16. U. S. Dept. of Labor, Bureau of Labor Statistics, "Glossary of Currently Used Wage Terms" Bulletin 983 (Washington: U. S. Government Printing Office: 1950), pp. 11-12, in I. L. O. Job Evaluation, p. 9.

17. I. L. O., "Payment by Results" Studies and Reports, New Series No. 27 (Geneva: 1959), p. 42.

The definitions or descriptions indicate that job evaluation is a method that attempts to provide a more systematic and objective basis for the comparison of job contents to establish a more rational pay structure. It is to be noted that some definitions refer to "relative value" or "worth." The true aim of job evaluation is the ranking of jobs by a systematic comparison of job contents rather than the determination or establishment of the often imprecise notion of its "value."

One of the features of a modern industrial enterprise is its division of labor, complexities of specialization and intricate interdependencies. A large industrial concern normally has many hundreds of different jobs, each of which may be performed by several persons. Many people work on the same or similar or technically interdependent jobs that are performed in an orderly and harmonious fashion.

Persons whose work is similar or interdependent are likely to work under similar or uniform conditions. Persons performing identical functions under comparable work conditions can hardly be expected to receive different rates of pay.

Another important aspect of a modern enterprise is that jobs are no longer differentiated primarily by the degree of skill they require. This is basically true because a good many jobs fall within a narrow range of relatively limited skills. In the old days of firms with master craftsmen, pay could be determined by reference to skilled, semi-skilled and unskilled work. Although this is still a basic guiding principle, differences in other job characteristics and job factors, such as responsibility, effort, and complexity have assumed greater

importance and have become major distinguishing characteristics and the basis for differences.

People working together in similar jobs put emphasis on difference in job contents if officially designated job descriptions change or methods of performance alter. They expect, if not demand, changes in performance to be reflected accordingly in pay as well.

Under modern conditions of work, it has become desirable, if not necessary, to determine relative pay on the basis of some kind of comparison between job contents. As a corollary for the claim that equal pay must be given for equal work, people have feelings that differences in job contents must be reflected in unequal pay for the particular jobs concerned. Such strong feelings of employees about the fairness and equity of relative compensation is undoubtedly one of the factors that has increased interest in job evaluation.

The application of job evaluation as a logical and systematic method of comparing job contents was also influenced by post-war abnormalities of the labor market.<sup>18</sup> The abnormalities of the employment market was accompanied by either freezing of pay or constant adjustments to the cost of living and often by labor shortages, particularly those in skilled or semi-skilled jobs.

In the United States, the National War Labor Board was the major organization that stimulated the increased application of job evaluation, as a method of pointing out the inequities in the pay structure.

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18. I. L. O., "Job Evaluation," p. 7.

Similarly in the Netherlands, post-war wage control encouraged the application of job evaluation. The method was used to make appropriate changes and adjustments for certain particular jobs in some industries without disrupting the general purpose of maintaining stability in the national wage level as a whole. In Germany, too, job evaluation was widely applied in the course of World War II and during the subsequent years after the war, when wage control continued to be exercised.

Finally, job evaluation has been accepted and welcomed because it has been found to be a device that establishes a pay structure which broadly satisfied workers.

But to say that job evaluation has been accepted and welcomed enthusiastically is far from the truth. The device has been accepted reluctantly and even rejected emphatically by employees as well as employers. Some employees regarded it with considerable distrust for a number of reasons. Some employers have been skeptical of the system and prefer to fix pay by simple, traditional methods. Some find it too costly and time consuming and believe that it does not lead to a substantially different pay structure from one that could be determined and established through less sophisticated methods.

We will discuss the application, limitations, and virtues of job evaluation methods in detail in subsequent chapters. We will now turn to examine the various methods of job evaluation.

#### Methods of Job Evaluation

The determination of job relationships on the basis of job contents and the process of fixing relative pay have been approached from

different angles, and various methods have been developed over the years.

At least four types of job evaluation methods have been recognized.<sup>19</sup> They are: simple ranking method, the classification method, the factor comparison method, and the point rating method. The first two methods have been identified as non-analytical plans, and the last two have been considered as analytical. Although the point rating system is the most widely applied (the one we are basically concerned with), very brief descriptions of the various methods will be beneficial.

#### The Non-Analytical Methods

The Rank Method: This is a method that involves a process of merely arranging jobs in order of the requirements they are considered to place on persons who perform them. This is normally determined on the basis of their titles or simple descriptions of the jobs involved. Jobs are then placed in order of increasing value. After all are ranked, they are classified into groups of small number of grades and the wage and salary rates will be established for each of these classes.

The method is the simplest of all the job evaluation methods. Furthermore, it is inexpensive, quick, and does not require large staff personnel.

However, the method cannot be satisfactory in an enterprise with several hundreds of jobs, some of which can be complex. Besides, jobs may be ranked without the benefit of a well-determined standard and on the basis of insufficient information. The scale of value, as decided by the

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19. Ibid., I. L. O., pp. 20-38.

raters, may change from time to time, thus making decisions largely based on compromises. It may also be possible that the method is too simplified to the extent that it become superficial and in effect ranks incumbents rather than jobs.

Classification Method: This is a refinement of the simple ranking system. It differs from the previous method in that it determines and establishes top grades or classes and then assigns jobs to these classes. It thus determines the number of job classes and the corresponding functions, based on job descriptions, which will be used to assign jobs to the various grades established.

The grade descriptions are defined in such a manner as to cover discernable differences in job contents. Each succeeding grade reflects a higher level in job characteristics, for instance, in such areas as skill, responsibility and supervision received.

The method is simple to operate and understand. It is neither expensive nor does it consume time or involve technical expertise. Its vagueness provides comparative flexibility. However, its application can be satisfactory in a small organization with few jobs but not in large enterprises with many varied and complex jobs. As the range of jobs increases and gets more complex, it becomes more and more difficult to classify different jobs into a limited number of grade descriptions. As in the ranking method, the classification method does not provide safeguards against errors committed due to influences of incumbents.

### Analytical Methods

The analytical job evaluation plans differ from the above-described non-analytical ones in that comparisons of job contents are made individually on the basis of each job characteristic or factor. These job factors are common characteristics to the majority, if not all, of the jobs covered under a given plan. Point values are assigned to the various degrees in each factor and thus quantitative expression is given when a job content is compared with another. Point values are added to represent the job content in its totality.

The Factor Comparison Method: This method involves the ranking of different jobs in terms of selected common factors. The process is concerned with the determination of key or benchmark jobs. Then these key jobs are ranked by reference to each of the factors chosen. Then the pay rate for each key job is broken down and distributed among the factors in relation to which they are considered to contribute to the total rate.

Key jobs must satisfy the following conditions:

1. They must lend themselves to precise descriptions and be capable of analyses in terms of the factors applied.
2. The classes of jobs considered must cover sufficiently wide ranges concerning the importance of each factor.
3. The rates for key jobs must be regarded as appropriate by all concerned and, in most cases, at least for certain jobs, these rates must not differ considerably from the rates prevailing in the external market condition within which the firm operates.

4. They must include jobs of sufficient pay classes. In other words, they must include jobs from the lowest and highest classifications in the firm. The number of key jobs required for the purpose of job evaluation under the factor comparison method largely depends on the number and variety of jobs in the firm. It thus may vary from less than fifteen to more than a hundred.

The merit of the factor comparison method is that it provides a more systematic comparison of jobs than any of the two non-analytical methods. The selection of key jobs, their ranking and allocation of base rates to the various factors requires development of a consistent plan. This increases internal consistency as several checking and cross-checking processes take place.

However, the plan requires more time and effort than the other methods. It is not easily understood by employees. One of the basic features of the system is that it is based on the assumption that rates for key jobs are correct and that other rates are determined by reference to this established rate. Furthermore, since the method directly leads to the determination of pay, the operation does not separate evaluating jobs and determining their pay.

The Point Rating Method: Under this plan, as in the factor comparison method, several factors are distinguished. But unlike the factor comparison method that ranks jobs simply in reference to the various factors, the point rating method involves the definition of the various levels or degrees in a fairly detailed manner. The jobs are analyzed in terms of these definitions rather than with respect to each other.

The various factor degrees are assigned point values that represent the importance provided to the various elements that constitute a job. The addition of these points results in a single measure of the content of a given job. The evaluation process involves the selection and definition of the factors to be used in the plan, the determination of the number of degrees to be distinguished under each job factor, the definition or description of each degree in discernable precision, and the assignment of point values to each degree in each factor.

One of the virtues of the system is that it uses point values rather than money values. It thus is capable of keeping job evaluation and pay fixing separate. The evaluation of jobs on predetermined and carefully defined factors and degrees makes the method more objective and possibly fairer than other methods.

However, the method is time consuming and requires technical expertise. It is inflexible since it uses predetermined factors and degrees. Furthermore, it is incapable of differentiating a large variety of job characteristics since they are covered by restricted numbers of factors and degrees.

We have discussed briefly the various methods of job evaluating, their merits and limitations. The next chapter will examine with practical illustrations, the analytical methods of job evaluation as it is applied in TWA.

## CHAPTER VI

### TWA'S EVALUATION PLANS

As mentioned before, TWA wages and salary structure recognizes three broad categories of jobs: contract or union jobs whose wages and salaries are determined, established and administered by collective bargaining and agreements, non-contract/non-management, and management jobs, whose relative salaries are determined by some kind of job evaluation plans. The management salary program constitutes three broad divisions. They include officers, top management, and middle and lower management positions.

Officers: The compensation of corporate and staff vice presidents and other officers of the company is determined by the president and the Board of Directors with the advice of Compensation Committee, which is made up of the president and three additional members of the Board, who are not members of TWA management group.

Top Management Jobs: These are senior management jobs which are classified into eight salary grades. The jobs are rated on the basis of an evaluation plan that was developed about 1960. Factors considered are:

Knowledge - scope and depth of education, training, experience.

Complexity of decision - amount of mental skill, such as imagination, creativity, adaptability, flexibility, initiative, ingenuity.

Planning - involving short or long term operations of organizational units.

Policy and procedural responsibility - formulating and interpreting policies and procedures.

Profit responsibility - involving actual and potential profit responsibility in selling or purchasing assets, negotiating with unions, investing or protecting assets and controlling costs.

Middle and Lower Management Jobs: This is the classification that includes all management jobs not included in the top management category described above. They have been classified into eight salary grades. The jobs are evaluated on the basis of the point rating system, which has been in use since 1948. Since this is the area the intern concentrated on, the plan will be discussed in greater detail in the subsequent pages.

Non-Supervisory Jobs: These include non-union/non-management jobs which are normally clerical or routine nature. The salary structure classifies these jobs into 14 salary grades. The evaluation plan has been in use since 1954, and it will be discussed later.

Evaluation of Foremen and General Foremen: These are jobs which do not fit into the evaluation plans developed by TWA. Such jobs are reviewed every two years and classified and re-classified on the basis of statistical analysis pertaining to certain factors, such as number of employees under a given position, the average number of scheduled flights per month, man hours of maintenance, maintenance of parking lots determined by the size of square feet, and maintenance of buildings in square feet. All stations will be ranked in each of these factors and final salary grade determined.

Sales Personnel Evaluation Plan: These again are evaluated on the basis of statistical analysis based on such factors as the number of personnel, number of flight departures per month, total revenue, number of passengers boarded, and the amount of cargo handled by locations. The review is made every year and necessary classification made.

The salary program for the last mentioned jobs of foremen, general foremen and sales personnel is not different from those established for management jobs. Only the evaluation factors are different.

Before we go into the specific evaluation plans developed and used by TWA, it may be of some benefit to briefly consider why and what criterion is used to identify a management job from that of non-management in TWA.

The purposes of determining a management job are:

1. to establish positions not subject to overtime pay.
2. to establish positions whose incumbents will not be penalized for lost time, within certain limits.
3. to determine the lowest level authorized to sign performance ratings.
4. To determine the lowest level of those who may initiate payroll changes.
5. to establish a group who will receive special communication from highest company officials.

Who is a member of management in TWA? A person who directs or controls a segment of the corporation, entrusted with authority and charged with the responsibility for achieving a general purpose, empowered to represent the corporation in its other-than-routine dealings with

the public, who develops, approves, and recommends those policies or procedures or changes which govern the company in the conduct of its internal affairs and relationships with employees is a member of management.

The following are specific criterion of determining a management job:

1. Supervisory: In this category of management functions, the incumbent of a position generally performs these functions:
  - a. He customarily or regularly directs the work of other employees in a given unit, assigns duties and inspects performance.
  - b. He has authority to hire, transfer, promote, discharge, suspend, lay off, recall, reward, or discipline or otherwise effect change in employee status or adjust employee grievances.
  - c. He customarily and regularly exercises discretionary power and use of independent judgement.
  - d. In a work week, he does not exceed twenty per cent of hours of work performing work done by employees he directs, nor perform work of a routine or clerical nature except in training or emergencies.
  - e. He determines the planning and procedure of work in his unit and maintains and improves established work schedules.
  - f. He has free access to other sections of his department and freedom of contact with other management personnel.
2. Administrative: The incumbent performs these functions:
  - a. He works on general assignments with minimum direct supervision.
  - b. He performs work of specialized, non-routine nature.

- c. He recommends courses of action to his superiors.
- d. He has free access to other sections of his department and freedom of contact with the other management personnel.
- e. He performs non-routine work directly related to management policies or general business operations, along specialized or technical lines requiring specialized training, experience or knowledge.

3. Professional: The incumbent of such management position performs the following functions:

- a. He engages in work predominantly intellectual and varied in character.
- b. He is constantly required to exercise discretion and judgement in performance.
- c. He does work in which output or result cannot be standardized in relation to given periods of time.
- d. In a work week, he does not exceed twenty per cent of hours of work in doing work performed by non-supervisory employees where their work is not part of professional work.
- e. He acquires knowledge of advanced type in the field of science or learning, acquired by prolonged course of specialized intellectual instruction and study.
- f. He does original and creative work in his field of endeavor, whose results primarily depend on invention, imagination and talent.

Not all management positions satisfy these requirements nor is a position designated as management because it fulfills some of these criteria.

The following will be a presentation of two of the major and more widely used evaluation plans now in effect in TWA.

Middle and Lower Management Evaluation Plan<sup>20</sup> This is the most widely used management evaluation plan. This plan has four major factors to be considered in evaluating a management job. These are knowledge, decisions, responsibility and working conditions. The management job rating sheet is shown in Appendix C.

1. The Knowledge Factor: Knowledge has been defined as a fund of information acquired through formal academic or technical training, work experience, or a combination of education and experience. The knowledge requirement for the purpose of the evaluation plan is defined as the minimum fund of information required for the satisfactory accomplishment of assigned duties. The knowledge factor considers the "know-how" that is required by the job.

Most management jobs require a practical or professional knowledge in one part or phase of a major field or business experience. For instance, a job in the Disbursements Section requires knowledge in accounting, or a job dealing with employment requires knowledge in Industrial Relations. Furthermore, all require some knowledge of certain activities in closely related functions. The plan is designed to rank the knowledge requirement of jobs by major functions. The ranking is done by functions, and then the sum of the total functions will provide

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20. Trans World Airlines, "Management Evaluation Plan," Analysts Training Session. (September, 1964), pp. 6-19 (mimeographed).

the overall knowledge rating. Normally, a given job will require a thorough knowledge in only one phase or part of a major field, a few in more than one.

There are obviously differences in the degree in the amount (breadth or depth) of knowledge required. For instance, a Director of Salary Programs position requires more knowledge in the major field of Industrial Relations than a Manager of Job Evaluation position. Very few jobs require a complete knowledge of all phases of a major field. As a supplement to the basic knowledge requirement of a job, most jobs require general knowledge concerning other fields and functions of the company. Such supplemental knowledge is required for the satisfactory coordination of activities.

Below are the definitions of the major fields of knowledge to be ranked. The selection of the major fields tends to match the organizational set up of the company as well as certain professional fields of study.

#### Major Fields

Accounting: The activities concerned with the application of principles underlying the keeping of business accounts, including making entries, proper balances, explanation of results with reference to the conduct and condition of the company are a part of accounting. Included are such functions as company business statistics, budget administration and related systems and procedures, development and statistical analysis.

Aircraft Maintenance: This is the activity concerned with the overhaul, repair, upkeep or physical modification of aircraft and directly related components, including production, control and coordination.

Economics: This field is concerned with the investigation of the conditions and principles affecting the production, distribution and consumption of wealth, as they relate to the air transport industry in general and the company in particular. Examples are market and economic research, long range schedule planning and economic forecasting.

Engineering: This is the science and practice by which the properties of matter and sources of power are made useful in structures, machines and manufactured products as these are related to the company and its needs for work space, aircraft, communications systems and other physical equipment. It is also the use of scientific method in the development and establishment of standards and methods. Included are both aircraft and component planning and modification as well as facilities, planning and construction and the development of procedural or operating methods to the physical components.

Finance: This is the art of raising capital and the management of internal monetary affairs. Included are budget controls, cash control, company financial forecasting, insurance and tax policy and administration.

Flight Operations: These are the activities and services performed for and in conjunction with the direct operation of the aircraft, including operational planning, dispatching, crew scheduling and other activities related to the operation of the aircraft.

Industrial Relations: This field includes the activities pertaining to personnel, such as employment, management development and training, labor relations and negotiations, compensation, medical programs, employee benefits, welfare and services.

Law: This field is concerned with the system of rules and regulations governing the conduct of society as related to the corporation. Knowledge of law is required when it is necessary to interpret or apply laws or to follow prescribed legal procedures. Included are contract administration, regulatory proceedings and properties and facilities administration.

Customer Service: This is the activity performed in carrying out ground and in-flight cabin services in direct conjunction with flight operations, including ticketing and passenger check-in, commissary, food service, hostess service, cargo handling and ramp management.

Plant and Equipment Maintenance: This is the activity concerned with the overhaul, modification, repair and upkeep of company operated structures and ground (all non-flight) equipment.

Public Relations: This is the activity relating to development and control of public opinion to the end that favorable action toward TWA results, including civic and federal affairs.

Purchasing: This is the activity pertaining to the procuring of fuels, materials and equipment and the sale of surplus materials and equipment (aircraft purchase and sale specifically excluded). Included are provisioning, inventory control, and activities concerned with warranty administration.

Sales: This covers the activities performed directly in connection with the sale of TWA service, including tariff and current flight schedules, reservations, advertising and industry affairs related to sales policies and procedures.

Stores: This is the activity pertaining to receiving, storing and controlling of materials, parts, supplies and equipment used in the operation of the corporation, including the shipment of such materials and components from point to point.

Some specialized or professional fields may be used occasionally, such as credit, audit, meteorology, printing and publication, etc. Knowledge factor points are shown in TABLE III.

2. Decision Factor: This factor is concerned with applying the required knowledge to the actual work situation within the limits imposed by the various forms of guidelines. It is the "problem solving" requirement, the requirement for depth or thinking or the demand for the application of mental power. Jobs will differ in this factor depending on how difficult, varied and complex the decisions are, the scope of their effect, and the amount of certain mental skills which must be exercised in order to perform position duties satisfactorily. Considerations are given to how new and complicated are the situations usually encountered about which correct judgements must be formed. Also considered are the overall limitations of precedent and supervision and on how much (geographical area) of the company will be directly affected by the decisions required of the job.

### Decisions Definitions

Complexities of Decisions: Here the inherent intricacy of the job, the difficulty of the decisions which the duties of the job present, the depth and continuity of thought, mental alertness demanded by the job because of diversity of work, variety of problems, lack of guidelines, compulsion for immediate action, etc., are considered.

Required Abilities: This factor is concerned with mental skills required in varying degrees. Its sub-factors include:

a. Initiative - the ability to individually enter upon a course of action without direction.

b. Foresight - the ability to visualize and evaluate the effect of an action or a future circumstance which may affect the duty involved.

c. Resourcefulness - the ability to improvise and solve problems and meet emergencies as they arise; ability for meeting new and changing conditions.

d. Creativeness - the ability to bring into being an original article, presentation or idea.

e. Planning - the ability to devise or project a course of action.

The importance of planning is the extent to which the planning may affect the conduct of the business both in daily operations and in future developments.

Scope: The geographical area of the company directly affected by the decisions normally required on the job will be considered.

The normal judgements made in the daily performance of the job will be considered.

For instance, the decisions of senior sales representatives are local or district in character. Those of a Regional Director of Customer Service are regional. Those of the Director of Reservations are system-wide in effect. Scope rankings are made for decisions affecting policy. Normally, but not always, the ranking will be the same for similar levels.

Guidelines: This considers the existence of established instructions, precedent, established procedures and practices, and the individuals in the organization to control or assist with technical or specialized aid and advice. More credit is given when dealing with unrestricted or intangible alternatives and less when established practice, precedents, instructions and rules furnish assistance in making required decisions.

Supervision Received: This considers the assistance received from supervision in performing duties, solving problems and making decisions. It considers the restrictions imposed by supervision against making free decisions. More credit is given when position is free to create or interpret policy to act without reference to supervision and less when supervision is close.

3. Responsibility: This is one of the major job characteristics in the management job evaluation plan.

Responsibility is the obligation placed upon a position by the assigned duties and is measured by the degree to which it is held liable for the effect of decisions and the consequences of actions. Responsibility accrues to a position both from duties performed by the incumbent of a position and duties or functions assigned to subordinates.

There are a number of sub-factors to be considered. In each sub-factor, all the duties of a job, whether performed by the incumbent or a subordinate, are considered. Also to be borne in mind are such considerations as the areas, the frequency of possible failures or improvement, the gravity of error and the safeguards provided against failure, assessment of the seriousness of loss or gain of money, time or good will. The sub-factors are:

a. Responsibility for Administrative Supervision of Personnel: Only the number of personnel administratively supervised by the position either directly or through others will be considered. The factors will not be used to give credit for functional direction of personnel who report administratively to others. The responsibility of the position is further analyzed for:

1) Planning: This is the scheduling of work or men or determining the numbers required. It does not include planning activities unless the number or scheduling of men is involved.

2) Selecting: Screening or hiring employees.

3) Organizing: Defining relationships between responsibility, authority and accountability, systematizing personnel structure of a major function.

4) Coordinating: Harmonizing the activities of two or more functional units.

5) Disciplining: Counselling, punishing or discharging employees.

6) Training: Providing classroom or on-the-job instruction in the methods of performing duties.

7) **Paying:** Determining or approving the salaries of employees. This does not include delivery of paychecks or approving overtime. It rather includes approving or recommending merit increases.

8) **Promoting:** Recommending or approving the advancement in rank of employees.

9) **Safety:** Enforcing adherence to safety regulations and providing safe working conditions.

10) **Relations:** Developing and maintaining proper attitudes of employee and amicable relations with and between employees.

b. Responsibility for Markets and Services: This area of responsibility factor considers:

1) **Initiating:** Introducing a service or developing a new market.

2) **Selling:** Sale of TWA service, material or equipment.

3) **Planning:** Laying out or developing a course of action to be followed in selling or servicing the public.

4) **Advertising:** Developing or placing before the public advertisement of TWA service.

5) **Pricing:** Determining or establishing transportation rates and/or sales price of material and equipment.

6) **Negotiating:** Arranging and bargaining a market or a service provided for or by TWA.

7) **Servicing:** Performing necessary additional or non-routine services in connection with maintaining a market or

service to the public.

8) Corresponding: Initiating or approving correspondence with outsiders relative to TWA markets and services.

c. Responsibility for Records. Records are such documents as financial statements, maintenance, personnel, or procurement records, accounting analyses, ledgers or journals, contracts, audit, research, marketing reports, engineering drawings, etc., or other written records of data necessary to the progress and operation of the company. It considers the responsibility of a job for assembling and processing data on records and/or taking action based thereon. This is normally heavy in staff jobs. It considers:

- 1) Originating: Introducing or initiating the compilation of data.
- 2) Interpreting: Defining the meaning or significance of a record, such as a report, statement, contract, etc.
- 3) Securing: Obtaining and compiling non-routine information (e.g., research).
- 4) Designing: Planning new records in detail.
- 5) Approving: Indicating, either verbally or in writing, sanction of a record, concerning its necessity, desirability, content, format, etc.
- 6) Analyzing: Conducting minute and critical examinations of a record for the purpose of interpreting and/or taking action.

d. Responsibility for Methods and Procedures. These are modes or systems for accomplishment of desired objectives,

sequential steps to be followed in carrying out functions. This responsibility is normally heavy in staff jobs. It considers:

- 1) Developing: Understanding problems and considering the details to arrive at a solution.
- 2) Originating: Initiating the method or procedure.
- 3) Selecting: Choosing one of two or more methods of performance.
- 4) Improving: Bettering an existing method or procedure.
- 5) Coordinating: Effecting proper relationships and preventing conflicts between procedures.
- 6) Installing: Placing new or changed methods or procedures into effect.
- 7) Maintaining: Enforcing continuous adherence to, or compliance with established procedure.

e. Responsibility for Policy. Policies are broad principles or guidelines to be observed in the execution of the company's activities, providing direction toward the company's objective. This responsibility is heavy in staff jobs. It considers originating, developing, improving, interpreting, coordinating, maintaining, and selecting in the same fashion as in d. above.

f. Responsibility for Assets. This considers the responsibility the job has for material items of value, which are the tangible resources of the company. It considers responsibility for money, materials

and equipment, analyzed further for:

1) Money

- a) Safekeeping: Protecting cash or negotiable papers against loss.
- b) Expending: Authorizing outlay of company funds for materials, equipment, or services.
- c) Collecting: Obtaining payment of funds due the company.
- d) Controlling: Keeping operational costs within desired limits.

2) Materials. This pertains primarily to aircraft materials and parts but also to other raw or semi-processed materials needed in large quantities to fulfill some process or objective. It considers:

- a) Procuring: Purchasing or requisitioning materials needed.
- b) Storing: Shelving materials when not in active use and includes safekeeping.
- c) Selecting: Choosing material to procure or use.
- d) Processing: Altering the form of material in their use.
- e) Transferring: Moving materials from one point to another.
- f) Inspecting: Determining conformance of material with specifications, the quality of material and/or presence

of defects.

g) Planning: Determining quantity, quality and/or schedule of useage of materials to be required.

h) Using: The use of material without altering its form.

i) Guarding: Preventing damage or loss from external causes.

3. Equipment. This pertains to aircraft and components, IBM, ground maintenance operations and shop equipment, including buildings and structures. It considers designing, planning, selecting, operating, guarding, transferring, maintaining, inspecting, procuring and storing.

g. Responsibility for Outside Relations. This considers significant relationships with persons outside TWA for the purpose of furthering TWA's business. This considers:

1. Informing: Communicating knowledge or information to outside.

2. Influencing: Effecting or producing a favorable reaction to the company by indirect means.

3. Persuading: Inducing favorable action by direct means.

4. Indoctrinating: Instructing in or imbuing with a principle or doctrine.

5. Interpreting: Defining the meaning or significance of external conditions which affect TWA.

### Working Conditions

This considers the surroundings in which work is normally performed, the exposure to accident hazards, and the amount of travelling required in the performance of the duties.

1. Surroundings: The work place in which the duties must be performed is considered but only those factors which are disagreeable or uncomfortable, which are inherent in the position and cannot be corrected by the company, such as exposure to the elements.

2. Travelling: The amount of travelling away from domicile that is required by the job in terms of work days per month, based on a five-day work week is considered.

3. Hazards: This considers the health and accident risks to which the duties expose the incumbent after all safety measures have been taken.

### Points and Their Assignments

It has been shown that four major job characteristics or factors are considered in evaluating a management designated job: knowledge, decision, responsibility and working conditions. Table II shows the knowledge factor points assigned to fourteen different major fields. The depth of knowledge required in any major field has been divided into four basic levels. The lowest level represents acquaintance, the next higher level being working, the third, thorough, and the highest being corporate direction. The latter may be used only in rating positions reporting directly to the president of the company or to a major department head. Each level of knowledge is classified into varying degrees.

Knowledge Factor Points

Table II

Major Field	Corporate Direction			Thorough					Working					Acquaintance						
Law	100	95	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10	5
Economics	100	95	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10	5
Flight Operations	99	94	89	84	79	74	69	64	59	54	49	44	39	34	29	24	19	14	9	4
Aircraft Maintenance	99	94	89	84	79	74	69	64	59	54	49	44	39	34	29	24	19	14	9	4
Finance	99	94	89	84	79	74	69	64	59	54	49	44	39	34	29	24	19	14	9	4
Accounting	98	93	88	83	78	73	68	63	58	53	48	43	38	33	28	23	18	13	8	3
Engineering	98	93	88	83	78	73	68	63	58	53	48	43	38	33	28	23	18	13	8	3
Industrial Relations	98	93	88	83	78	73	68	63	58	53	48	43	38	33	28	23	18	13	8	3
Customer Relations	97	92	87	82	77	72	67	62	57	52	47	42	37	32	27	22	17	12	7	2
Sales	97	92	87	82	77	72	67	62	57	52	47	42	37	32	27	22	17	12	7	2
Plant and Ground Equip. Maintenance	97	92	87	82	77	72	67	62	57	52	47	42	37	32	27	22	17	12	7	2
Public Relations	96	91	86	81	76	71	66	61	56	51	46	41	36	31	26	21	16	11	6	1
Purchasing	96	91	86	81	76	71	66	61	56	51	46	41	36	31	26	21	16	11	6	1
Stores	96	91	86	81	76	71	66	61	56	51	46	41	36	31	26	21	16	11	6	1

Source: Trans World Airlines, "Management Evaluation Plan," Analyst Training Session (September, 1964), p. 5 (mimeographed).

Table III-A

Decision Factor Points

Raw Score

Job Characteristics	Points (Degrees)				
Complexity	1	2	3	4	5
Initiative	1	2	3	4	5
Foresight	1	2	3	4	5
Resourcefulness	1	2	3	4	5
Creativeness	1	2	3	4	5
Planning	1	2	3	4	5
Scope	District	Region	Domestic or Int'l.	System	-
Methods and Procedures	1	2	3	4	5
Policies	1	2	3	4	5
Guidelines	1	2	3	4	5
Supervision	1	2	3	4	5

Source: "Management Evaluation Plan," Analysts Training Session, pp. 8-9.

Decision Factor Point Value Conversion

Table III-B

Raw Score	Final Value	Raw Score	Final Value	Raw Score	Final Value
7	64	23	117	39	237
8	67	24	121	40	251
9	70	25	125	41	265
10	73	26	129	42	279
11	76	27	133	43	294
12	79	28	138	44	309
13	82	29	143	45	324
14	85	30	149	46	340
15	88	31	155	47	356
16	91	32	162	48	372
17	94	33	169		
18	97	34	177		
19	101	35	187		
20	105	36	198		
21	109	37	211		
22	113	38	224		

Source: "Management Evaluation Plan," Analysts Training Session, pp. 8-9.

## Responsibility Factor Points

Table IV

Raw Score

1. The following point values are used in ranking the responsibility sub-factors:

Point values: 1, 2, 3, 4, 5.

2. Point values are assigned to "Number Supervised" and "Type" as follows in Table IV-A.

Table IV-A

<u>Number Supervised</u>	<u>Points</u>	<u>Type of Men</u>	<u>Points</u>
1 - 50	1	Subordinate personnel assigned to clerical through salary grade 32 or labor grade 10 or below	1
51 - 150	2	Clerical or technical through salary grade 33 or labor grade 15	2
151 - 300	3	Technical or supervisory through salary grade 38	3
301 - 550	4	Technical or supervisory through salary grade VIII	4
551 or over	5	Technical or supervisory through salary grade V	5

Table IV-B

3. Additional point values for "Methods and Procedures" and "Policies" according to their type and scope are assigned as follows:

Type	Points	Scope	Points
Law	5	District	1
Economics	5	Regional	2
Flight Operations	4	Domestic or International	3
Aircraft Maintenance	4	System	4
Finance	4		
Accounting	3		
Engineering	3		
Industrial Relations	3		
Customer Service	2		
Sales	2		
Plant & Ground Equipment			
Maintenance	2		
Public Relations	1		
Purchasing	1		
Stores	1		

Table IV-C

Responsibility Point Value List

Raw Score	Final Value	Raw Score	Final Value	Raw Score	Final Value
15	26	53	97	91	166
16	27	54	99	92	167
17	29	55	100	93	169
18	31	56	102	94	171
19	32	57	104	95	173
20	34	58	106	96	175
21	36	59	108	97	176
22	37	60	110	98	177
23	39	61	112	99	180
24	40	62	114	100	181
25	45	63	115	101	182
26	47	64	117	102	184
27	49	65	119	103	185
28	50	66	121	104	186
29	52	67	122	105	188
30	54	68	124	106	192
31	56	69	126	107	194
32	58	70	128	108	196
33	59	71	130	109	200
34	61	72	131	110	205
35	63	73	133	111	210
36	65	74	135	112	215
37	67	75	136	113	217
38	68	76	138	114	218
39	70	77	140	115	219
40	72	78	142	116	220
41	74	79	144	117	224
42	76	80	145	118	226
43	79	81	147	119	228
44	81	82	149	120	230
45	83	83	151	121	231
46	85	84	153	122	233
47	86	85	155	123	235
48	88	86	157	124	238
49	90	87	159	125	240
50	92	88	161	126	243
51	94	89	162	127	247
52	95	90	164	128	251

Table IV-C--Continued

Responsibility Point Value List

Raw Score	Final Value	Raw Score	Final Value	Raw Score	Final Value
129	255	154	310	179	358
130	259	155	312	180	360
131	261	156	314	181	362
132	264	157	316	182	364
133	267	158	318	183	366
134	270	159	320	184	368
135	272	160	322	185	370
136	274	161	322	186	372
137	276	162	324	187	374
138	278	163	327	188	376
139	280	164	328	189	378
140	282	165	330	190	380
141	284	166	332	191	382
142	286	167	334	192	384
143	288	168	336	193	386
144	290	169	338	194	388
145	292	170	340	195	390
146	294	171	342	196	392
147	296	172	344	197	394
148	298	173	346	198	396
149	300	174	348	199	398
150	302	175	350	200	400
151	304	176	352		
152	306	177	354		
153	308	178	356		

Source: "Management Evaluation, p. 17.

Table V

Working ConditionsA. Surroundings

	<u>Points</u>
Minor Disagreeable Elements	2
Disagreeable at Times	4
Not Continuous	6
Continuous	8
Constant	10

B. Traveling

	<u>Points</u>
Number of work days (1 to 20 x $\frac{1}{2}$ )	10 domestic - maximum
Number of work days (1 to 20 x 2)	40 international - maximum

C. Hazards

	<u>Points</u>
None	0
Little	5
Some	10

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Source: "Management Evaluation Plan," p. 19.

Table VI

Point Bands and Salary Grades

<u>Point Band</u>	<u>Salary Grade</u>
- 230	30
231 - 252	31
253 - 277	32
278 - 305	33
306 - 335	34
336 - 367	35
368 - 405	36
406 - 445	37
446 - 487	38
488 - 535	39
536 - 588	VIII
589 - 646	VII
647 - 711	VI
712 - 784	V
785 - 866	IV
867 - 959	III
960 -1064	II
1065 -1182	I

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Source: "Management Evaluation Plan," p. 19.

The Non-Management Evaluation Plan.<sup>21</sup> In the previous pages, we discussed TWA's management job evaluation plan. We will now examine another major evaluation plan, that of non-supervisory. Here, the factors considered are different, but the basic process and philosophy of the plan are the same. Each factor, along with the degrees and weights, will be presented below. (See Appendix C for a sample of the rating sheet)

1. Education. This is a factor that considers the minimum formal education or its equivalent that the job requires. It is to be emphasized that it is the requirement of the job that is rated, not the amount of education required by any particular individual employee in the position.

<u>Degree</u>	<u>Points</u>
Grammar School	50
2 years high school	60
4 years high school	70
4 years high school plus up to 6 month's course	75
4 years high school plus up to 6 to 12 months' course	80
1 year college	80
2 years college	100
3 years college	120
4 years college	145

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21. Trans World Airlines, "Non-Management Evaluation Plan," Analyst Training Session (September, 1964), pp. 1-12 (mimeographed).

2. Experience: This factor considers the amount of previous work experience required for an individual to fulfill the minimum requirements of the job. Experience desired may be general, specific, or related to a specific job.

<u>Degree</u>	<u>Amount of Previous Experience</u>	<u>Point Value</u>
-	None	-
1	3 months	50
2	6 months	65
3	1 year	85
4	1½ years	95
5	2 years	105
6	2½ years	115
7	3 years	125
8	4 years	145
9	5 years	165

3. Complexity: This factor considers the complexities and difficulties of the job. It measures the degree of mental effort and dexterity which the duties require to resolve complex data or problems by analysis in order to make decisions and take action. It considers ingenuity, judgement, initiative, concentration and memory, the amount of supervision given to the job and the extent to which the procedures define the work.

<u>Degree</u>	<u>Point Value</u>
---------------	--------------------

a. Simple repetitive work requiring a minimum degree of judgement, where procedures offer few or no alternative methods, subject to close supervision at frequent intervals.

<u>Degree</u>	<u>Point Value</u>
<p>b. Routine work involving a little variety of operations with a definite procedure which requires a little judgement and memory. May require concentration of a type necessary to perform frequent repetitive computations. The job is subject to close supervision.</p>	60
<p>c. Routine work involving a variety of operations requiring some judgement, analysis and memory in applying standard procedures and concentration of a type required to make frequent repetitive computations. Supervision is given occasionally in the performance of work and when it is necessary to deviate from existing procedures.</p>	75
<p>d. Semi-routine duties involving a variety of operations and a general knowledge of a restricted field requiring some judgement, analysis, ingenuity and initiative and occasionally deviating from standard procedures. May require a high degree of memory and concentration necessary to properly integrate a variety of related facts. Only situations for which no specific procedure exists are referred to the supervisor for decisions.</p>	100
<p>e. Intricate work which requires the application of intensive knowledge of a specialized field or general knowledge of company policies and procedures.</p>	

Considerable ingenuity, judgement, analysis and initiative are required in occasionally formulating new procedures based on precedent and company policies. May require a high degree of concentration and memory to perform duties. Refers to supervisors only specific cases which involve clarification or interpretation of company policies.

135

f. Highly technical or complex work involving new and unusual or constantly changing matter requiring a high degree of initiative, judgement, analysis and ingenuity. Participate in the developing of procedures and policies, setting up own standards of performance within broad limits and drawing conclusions without benefit of precedent.

185

4. Work of others: This factor considers the degree to which the job normally has responsibility for providing work guidance, instruction, or assigning work to other employees. It considers the number of employees involved, the relative difficulty of the work, and the extent to which the job is held accountable for the work of others.

Degree

Point Value

a. Work requires occasional directing or instructing of one to three employees engaged most of the time in performing the same kind of routine work. Occasionally assigns work to be performed by employees directed by others.

20

b. Work requires frequent direction or instruction of one to five employees or occasional direction or instruction of six to ten employees engaged in the same kind of routine work, frequently assigns work to be performed by employees who are directed by others.

30

c. Work requires frequent direction or instruction of six to ten employees engaged in the same or similar kind of work, eliminating ordinary difficulties where procedures usually are standardized and there is little necessity for improvisation. Considerable work time is spent in training or instructing employees whose regular duties are directed by others.

45

d. Work requires frequent direction or instruction of eleven to nineteen employees engaged in the same or similar kind of work, resolving complex problems occasionally where standard procedures or precedents are not complete. Most of the work time is spent in training or instructing employees whose regular duties are directed by others.

65

e. Work requires frequent direction or instruction of more than nineteen employees engaged in the same or similar kind of work, resolving difficulties caused by changing conditions, or the absence of standard procedures or precedents.

100

5. Contacts: This factor considers the extent to which the job is required to transact business with others, both inside and outside the company, either by personal contacts or through other means of communication. It considers the frequency of contacts, their importance, and possible effects, the relative difficulties which may be involved, and the tact, poise, aggressiveness and expression required.

<u>Degree</u>	<u>Point Value</u>
<p>a. Contacts with other sections or the public of a minor nature, requiring little tact, poise or expression.</p>	20
<p>b. Contacts with other sections or the public, furnishing or obtaining information. Work is generally non-controversial and may involve dealing with persons higher in the organization, furnishing explanations or obtaining approvals. Some tact, poise and expression required.</p>	30
<p>c. Individual responsibility or responsibility through one to three employees for frequent contacts with the public, furnishing or requesting information in connection with sales, service or matters wherein TWA is the customer. Work requires considerable tact and expression and a good knowledge of a specialized field.</p>	45
<p>d. Individual responsibility for specialized and frequent contacts with the public on matters requiring a high degree of diplomacy, or responsibility</p>	

through a group of more than three employees for frequent contacts in servicing or selling customers, with direct effect on operating results. 65

e. Frequent personal contacts with the public on sales solicitation, public relations, collection, claims, adjustment matters. Work requires a high degree of tact, poise, aggressiveness and expression in influencing the public in matters materially affecting the company's welfare. 100

6. Confidential Data and Records: This factor considers to what extent a job is concerned with safe-guarding and using confidential information and records. It considers the completeness of the confidential data available to the employee, its importance, and the probable effects of disclosure.

<u>Degree</u>	<u>Point Value</u>
a. Work requires contact with but not use of confidential records and information. The effect of disclosure would be negligible.	10
b. Work requires contact with and limited use of confidential records and information. Disclosure occasionally might have some adverse internal or external effect.	15
c. Work requires regular use or preparation of confidential records and information. Disclosure could have adverse effect either inside or outside the company.	20

d. Work requires use of confidential records and information of considerable importance. Disclosure could have fairly serious effects either inside or outside the company.

35

e. Work requires use or preparation of highly confidential records and information, disclosure of which could have serious affects. A high degree of integrity is required to protect the company's competitive position.

55

7. Assets: This factor considers the responsibility for safe-guarding money or property, checking or controlling expenditures or costs, and developing procedures which increase revenue, decrease costs or protect against losses. It considers the amount of money, the potential saving or increase in revenue, and value of equipment involved, the frequency of the opportunity of misuse, and the extent to which the work is verified or checked to prevent such losses. No credit is given for assets such as typewriters, adding machines, etc., in an office where a supervisor actually has responsibility for safe-guarding.

Degree

Point Value

a. Work occasionally involves individual responsibility for small amounts of money or small equipment and tools with very little probability of damage. Minor control of costs through check on records, etc.

10

b. Work regularly involves individual responsibility for small petty cash funds or small equipment and tools with the probability of damage. A little control of costs or expenditures through check of records or similar means is involved. 15

c. Work regularly involves individual responsibility for medium-sized petty cash fund, considerable daily cash receipts or tools and equipment with some possibility of damage. Authority to approve minor cash payments, such as meal tickets, taxi fare for passengers, etc. Some control of costs, expenditures or revenue through the check of records or similar means. May occasionally recommend changes in procedures to protect against loss, etc. 20

d. Work involves individual responsibility or responsibility through a small group of employees for considerable daily cash receipts or a fairly large amount of equipment with considerable probability of damage. Maintain large active petty cash fund. Authority to approve small cash payments; considerable control of costs, expenditures or revenue through check of records or similar means. Recommend changes in and a little development of procedures to protect against loss, etc. 45

e. Work involves individual responsibility and responsibility through a fairly large group of employees for large daily cash receipts and a large amount of equipment with considerable probability of damage. Authority to approve small cash payments. Extensive responsibility for control of costs, expenditures or revenue through check of records or similar means. Frequent development of procedures to protect against losses, etc.

75

8. Physical Requirements: This factor considers the demand of a job for physical exertion, including the frequency and intensity of such exertion and the muscular coordination and/or manual dexterity required in performance of the job.

It considers the amount of effort or endurance required, the body working position. Light work requiring little physical exertion or muscular dexterity and causing little fatigue is given minimum credit, while jobs requiring intermittent or heavy physical effort, or considerable manual dexterity, is evaluated higher based on the amount and continuity of effort or degree of manual dexterity required.

<u>Degree</u>	<u>Point Value</u>
a. Light work requiring a minimum of physical effort in which working position is not uncomfortable or fatiguing.	0
b. Light work involving occasional use of typewriter below minimum speed standards, calculator, adding machine, ditto or mimeograph, etc.	10

c. Light work requiring little physical effort in which there is intermittent sitting, standing, walking or mostly sitting with occasional breaks. Some bending or stooping, as in filing. Considerable manual dexterity, such as that required for frequent operation of typewriter at or above company minimum speed standards, calculator, adding machine, etc.

20

d. Some physical effort required, including a little lifting and carrying of light to average weight materials, or light work with substantial standing or walking, requiring well-developed manual dexterity, such as in taking and transcribing dictation, in operating a comptometer, key punch, etc.

35

e. Considerable physical effort required, working with average to heavy weight materials intermittently, with continuous standing or walking, occasional difficult working position or a little climbing, etc. Considerable muscular coordination or manual dexterity.

50

f. Considerable physical effort required, working with average to heavy weight materials, with continuous standing or walking. Intermittent to continuous physical strain, including some lifting and climbing and frequent difficult working positions.

High degree of muscular coordination or manual dexterity required in doing precise and close work.

65

9. Working Conditions: This factor considers two basic elements: surroundings and amount of traveling.

In section "A" it considers the surroundings in which the job is performed, the health and accident risks to which the employee is exposed. It considers only those disagreeable or uncomfortable conditions which cannot be corrected by the company and the degree of hazards encountered after all safety devices have been installed and safety measures have been taken.

In section "B" it considers the average amount of traveling away from domicile that is required by the job.

The total point value for this factor is obtained by adding the appropriate values assigned in both sections.

Degree      Section "A"

<u>Degree</u>	<u>Definition</u>	<u>Point Value</u>
-	Good working conditions with minor or no objectionable elements. No probability of injury.	0
1	Working conditions occasionally involve moderately disagreeable elements and infrequent exposure to probability of injury.	10
2	Frequent exposure to some disagreeable element, not extreme. Little probability of	

	minor injury which infrequently might result in lost time.	15
3	Occasional exposure to one or two definitely disagreeable elements for limited periods of time. Little probability of minor injury which occasionally might result in lost time.	25
4	Frequent exposure to one or two definitely disagreeable elements lasting for limited periods of time. Some probability of lost time injury or slight possibility of serious accident.	35
5	Frequent exposure to several definitely disa- greeable elements present for substantial periods of time. Some exposure to hazards involving possibility of serious accident.	45

Section "B"

<u>No. of calendar days of travel per year</u>	<u>Point Value</u>
Up to 30	10
31 to 60	15
61 to 100	20
101 to 200	25
Over 200	30

Table VIINon-Management Point Bands and Labor Grades

<u>Point Band</u>	<u>Labor Grade</u>
0 - 174	1
175 - 209	2
210 - 244	3
245 - 279	4
280 - 314	5
315 - 349	6
350 - 384	7
385 - 419	8
420 - 454	9
455 - 489	10
490 - 524	11
525 - 559	12
560 - 594	13
595 - 629	14
630 - 664	15

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Source: "Non-Management Evaluation Plan," Analysts Training Session, p. 12.

## CHAPTER VII

### JOB DESCRIPTIONS AND EVALUATION PROCEDURES

#### Job Descriptions

In the previous chapters, we have discussed the evaluation plans used in TWA. We will briefly examine the purpose and content of job descriptions in TWA.

The purpose of job description is to provide information about the actual content of a job. It usually contains indications of the purpose of the various functions involved, the environment and conditions under which the functions have to be performed, the equipment or tools used, the nature and degree of supervision given, and received, and the amount of responsibility involved. Thus, job description becomes an important part of an evaluation plan. Indeed, an entire evaluation plan is built upon it. Information gathered and contained in job descriptions may be used for purposes other than evaluations. It may be used for such personnel activities as selection and recruitment, training, transfer and promotion, establishment of safety programs. It may reveal possibilities of improving the organization and methods of operation.

TWA has established management and non-management position description forms, with guidelines for contents. A position description form is required to be completed when a new job is created or when the duties of an existing job change significantly. A change may occur

because of new or different duties assigned to an incumbent or there may be gradual change of existing duties resulting in a change in the method of performing the job, which may result in new responsibilities. The addition of another job, identical to an existing job which has already been described and evaluated in the same work unit, does not require job description. Certain functions and duties are assigned to each job specifically. The following is a review of the content of a management position description as set forth under the following headings.

1. Basic Functions. This section summarizes in three or four sentences, precisely and specifically the basic functions of the position, stating the overall objective of its existence.

2. Personally Performed Responsibilities. This section outlines the duties which are performed by the incumbent of a position. It contains:

a. Planning and Policy Responsibility. It sets forth the type and extent of plans, policies and objectives that position is expected to develop.

b. Procedural. This section describes the procedures, or the manner or proceedings for accomplishing a given purpose. It describes the development and installment of procedures and indicates whether approval of the position is final or must be referred for further approval, item by item.

c. Other Personally Performed Functions. This sets forth important functions which the incumbent performs personally.

d. Scope of Responsibility. This section indicates the

geographic area directly affected by the decisions required in this position, i.e., whether corporate, domestic or international, regional or local.

3. Delegated Responsibilities. This section calls for the listing of positions which the incumbent directly supervises and the "basic functions" for each of these functions. Only direct subordinates are included. Excluded are clerical and areas of organization over which the position exercises staff or functional supervision.

4. Supervision of others.

a. Administrative. This section reveals the total number of employees reporting to the position for administrative as opposed to functional supervision. Here titles of all direct subordinates are listed and the number of subordinate employees for whom each of the direct subordinates is responsible.

b. Functional (Staff). Some staff, as well as line positions, monitor or functionally supervise operations which report administratively to others. This may include monitoring policy and procedure performance by the line or providing advice or counsel to the line. Briefly described here are assigned responsibilities which require the exercise of staff supervision, including the type and approximate number who receive this supervision from the position under description.

5. Relationships.

a. Inside Relationships. This includes special contacts in other organization units with the company, which are necessary to the function performed.

b. Outside Relationships. This includes contacts and relations with persons or institutions outside the company which are important to the discharge of the responsibility of the position.

6. Traveling. Here the average number of work days per month away from domicile, for domestic or international travel are recorded.

7. Remarks. This permits additional comments or remarks to help clarify job requirements. Special qualifications, such as formal training, specific type of experience, or particular ability may be described along with reasons why these requirements are necessary.

8. Signatures. The form will be signed by the employee in the job, if applicable, and will have signature approvals of at least two levels of supervision, one of which is directly responsible for the job.

#### Non-Management Job Description

Below are major headings and descriptions of possible contents of the non-management job description form as used by TWA.

1. Purpose of the Job. This section summarizes all of the duties and overall functions of the job in not more than two sentences.

2. Listed under this section are major functions of the job in order of importance.

3. Duties of the Job. This spells out in greater detail each duty within a principal function, as outlined in Section 2. An estimate of the time spent in performing each duty is given.

4. Requirements of the Job. Listed in this section, as applicable, are:

- a. Job title of person from whom work guidance or direction is received.
- b. Number of employees by each job title to whom work guidance or direction is given.
- c. Inside or outside contacts, if required by the job.
- d. Responsibility for materials, records, equipment or cash.
- e. Amount of time spent per week in a particular type of condition (walking).

5. Working Conditions. This section indicates:

- a. Disagreeable elements, their frequencies and duration.
- b. The average number of calendar days per month away from domicile, with specific indication of domestic or international travels.

6. Approvals. Description is always signed by employee, if possible, and is approved by two levels of supervision immediately over the employee.

### Job Evaluation Procedures

We have described briefly the formats of the job descriptions for management and non-management positions in TWA. We will now examine the job evaluation procedure that is generally followed in the determination of salary for the above-discussed jobs.

The first step in evaluating a job is to receive the appropriate job description, after which time the description will be reviewed for

duties performed and proper signatures. Historical references from old jobs or similar jobs are checked to investigate possible overlaps or relationship to other jobs. Notes will be made on items needing clarification.

The next step is to start the audit of the job. First, the immediate supervisor of the job under consideration will be contacted in order to find out background information on job changes in general, overall purpose of its existence, how it was done previously (this may indicate effect on other jobs which may have lost responsibility), organizational relationship of job being studied. The second part of the audit procedure is interviewing the incumbent of a position, if any. Each item listed in the job description will be examined and employee asked for examples of stated duties. After gathering the required information through the process of auditing, a report will be written either in a narrative style or in a form of detailed explanation keyed to the numbered duty in the description.

The third step involves the determination of jobs for comparative purposes. By running through job number lists (all jobs are listed alphabetically with corresponding salary grades) and through master decks (job rating sheets are filed alphabetically) and pulling out job descriptions of comparable positions (each job has a job description file), ratings will be made. Usually a list of those jobs used for comparison will be made and recorded on the back of the rating sheet for future review and discussion.

The last step in the process of job evaluation is to establish classification of the job and advise supervisor directly (normally personal telephone contact is used) and later confirm position evaluation by letter.

## CHAPTER VIII

### SPECIAL SALARY PROGRAMS

In TWA, not all non-contract jobs fit either the management or the non-management salary programs or evaluation plans without some adjustments or special considerations. Of these, we will mention some of them.<sup>22</sup>

1. Medical and Related Jobs. Jobs in these areas of profession have been found to cause conflicting relationships between internal evaluation and classification and the actual compensation in the external environment. These jobs are evaluated on the basis of the previously described methods and classified into the appropriate salary grade. But in the event that the salary range for assigned salary grade becomes inadequate in the light of current market conditions, an additional salary range is provided.

2. Management positions which are the first level of supervision are paid at least ten per cent more than their highest paid non-management subordinates. A schedule of percentage differentials has been established. It sets forth ten per cent differential in the first year, fourteen in the second, and sixteen in the third. In certain cases, the differentials have been converted into minimum base rates for supervisors of certain non-management positions.

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22. Trans World Airlines, "Compensation Guide for Industrial Relations Personnel," pp. 7-10.

3. Secretarial Classifications. The organizational level, and in some few cases, the salary grade of a management position, determines the classification of secretarial services for that position. Secretarial classifications are designated as follows:

<u>Management Organization Level and Title</u>	<u>Secretarial Classification</u>
a. Chief Executive, President )	Senior Executive Secretary
b. Group and system heads, Senior ) Vice Presidents )	
c. Major department heads, corporate ) secretary and vice presidents )	
d. Department and regional heads	Administrative Secretary
e. Section and city/country heads	Senior Secretary

All positions in these levels in salary grade III and above may have Administrative secretaries. All other positions in this group are assigned Senior Secretaries, except General Managers below salary grade VII and Directors of Sales and Services at overseas locations below salary grade VII.

f. Sub-section and sub-city/country heads	Secretary
g. Unit heads	Secretary (two salary grades lower than secretary in f.)

Any management position which has more than one person reporting directly to it to do secretarial work (i.e., the second secretarial position working under one management position) shall be assigned a secretary in level g.

Other clerical classifications, including Typist-Clerk, Transcription Typist, Senior Transcription Typist, Senior Typist-Clerk, and Staff Assistant are evaluated on the basis of specific job descriptions.

In the event that a secretarial position is downgraded because of a change in her supervisor's duties which results in a lower organization level for his position, the appropriate secretarial classification shall be immediately effective. If the incumbent secretary chooses to continue as her supervisor's secretary and her salary is above the maximum of her new range, it will be reduced to at least the maximum, unless special considerations are made. In the event that a management title and organizational level is changed with no change in duties, but which would normally require that the adjunct secretarial position be downgraded, the higher secretarial classification may be retained as long as the present secretarial incumbent remains in the job.

If the general requirements of the job or a secretary's experience do not justify the secretarial classification for which the management position is eligible, a lower classification shall be used.

4. Senior Agent Classifications. Senior agent classifications have been established to fulfill the following primary objectives:

a. To provide recognition for agent personnel who are, because of ability, assigned to specialized or more responsible jobs, where the duties may not be more difficult but important customers or more than average revenue is involved.

b. To provide recognition for agents who are "professional" or long service agents and whose performance is highly satisfactory

but who appear to lack the potential for leading or supervising a group of people or for other reasons may be incapable of rising to supervisory status.

c. To provide an additional step in the agent hierarchy to motivate the agents who have shown high potential in a relatively short term of service but for whom immediate promotional opportunity is not present.

Three "senior agent" classifications are established: Senior Reservations Sales Agent, Senior Ticket Sales Agent, and Senior Transportation Agent, with different salary grades. These classifications are used within certain limits. Not more than fifteen per cent of the regular full-time agent personnel by type at a location may be classed as "senior agent." For purposes of establishing the Senior Agent classification in smaller locations where fifteen per cent of the agent group would amount to less than one Senior Agent, one agent may be reclassified to Senior Agent if there are at least four agents at that location.

An employee must have completed three years as a regular agent in the same basic agent classification before he can be promoted to Senior Agent.

5. Rates of Pay for Seasonal Full-Time Employees. TWA will pay seasonal full-time employees salaries at below normal hiring rates during their first three seasons of employment. They will be paid 85 per cent of minimum of salary grade assigned to position employee is filling for the first season, 90 per cent for the second season, and 95 per cent in the third season. Thereafter, after the third season in a full-time

classification, routine salary administration policies will apply. Employees are not eligible for service or merit increases while working on a seasonal full-time basis.

6. Salary Override Hawaii. A salary override will be paid for Hawaii-based employees to each locally hired or transferred U. S. National. The override is not a cost of living differential, but rather a program established in line with the salary practices of other employers in Hawaii to maintain competitive rates of pay for Hawaii-based employees.

## CHAPTER IX

### OVERSEAS COMPENSATION

TWA, as an international operation, has many stations or field offices in overseas areas where American nationals are assigned. Americans in these overseas services work and live in an environment involving economic conditions, laws, customs and other living conditions which may be substantially different from those found at home. The overseas compensation program has been developed in recognition of these factors.<sup>23</sup>

The basic objectives of the program are:

1. To provide compensation adequate to attract and retain high calibre Americans overseas.
2. To provide compensation that is fair to the employees.
3. To maintain a consistent relationship between domestic and overseas compensation.
4. To maintain competitive standards in the salary market for Americans in overseas service.
5. To facilitate transfer to, from and within overseas service.

The components of the Salary Program are:

1. Base Salary: The base salary of a U. S. national overseas is the salary that he would receive for the same or comparable job in domestic service. He is covered by the basic U. S. salary program; his

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23. Trans World Airlines, "Compensation Guide for Industrial Relations Personnel," pp. 7-10.

overseas position is evaluated under the U. S. job evaluation system and is assigned the U. S. salary grade appropriate to the duties, responsibilities and qualifications required in each instance without regard for geographic location.

2. Overseas Service Allowance. This considers the degree of difference between U. S. and foreign economic and living conditions in two measurable areas: taxes and cost of living.

An attempt is made to measure the difference between American and foreign economic and living conditions. Although some of the differences, such as the cost of living, lend itself to reasonable degree of measurement, others, such as social standards and cultural values, are intelligent estimates at best. The computations made in each of the three areas are identified as the tax equalization adjustment, the cost of living differential and the foreign service premium.

a. Tax Equalization Adjustment. This is computed as the amount of U. S. Federal income tax the overseas based American would have to pay on his base salary as if he had earned that salary in the U. S. The philosophy is that Americans transferred to foreign countries are permitted to exempt \$20,000 to \$25,000 annually from their taxable income. When the employee is transferred to a foreign city, he brings with him a desire to duplicate the American standard of living and to buy the same quantity of goods and services that he had been accustomed to buying with his net income in the U. S. In order to equalize the employee's U. S. and foreign standards of living in the U. S., it becomes necessary to determine the amount of U. S. net income he had required to

buy that standard of living in the U. S. The Tax Equalization Adjustment is designed to equalize the virtually tax-free U. S. national overseas with his tax-paying U. S. based counterpart.

b. Cost of Living Differential. This is a plan designed to keep the employee maintaining the purchasing power of his dollar so that he can simulate in his foreign surroundings the standard of living which he had been accustomed to in the U. S. The Cost of Living Differential thus represents the amount of difference between U. S. costs and foreign costs for an American standard of living. It is to be noted that the company does not pay for the employee's living cost per se, but only for the amount by which the average cost of living for an American in the foreign city exceeds the average cost of living for an American in the U. S.

The Cost of Living Differential is established where necessary in the form of "Post Allowance" to compensate for excessive costs of commodities and services, and in the form of "Quarter Allowance" to compensate for excessive costs of housing.

1) Post Allowance. Information concerning the cost of commodities and services in the U. S. and the various overseas cities are gathered, analyzed and published by the U. S. government agencies. The cost of living survey conducted and compared with foreign cities is a fairly precise indication of the amount by which foreign costs exceed U. S. costs, or in a few cases, U. S. costs exceed foreign costs. The American in that foreign city will receive a Post Allowance in the amount of the percentage that it is higher than the U. S. costs of the average spendable income. For instance, the U. S. costs set as an

index (at 100), a local index of 15 indicates that average costs exceed U. S. cost by 15 per cent, for the same commodities and services. Therefore, the foreign-city based employee will get 15 per cent of average spendable income in the form of Post Allowance.

2) Quarters Allowance. The housing component of the Cost of Living Differential measures the difference between average housing costs for Americans overseas as compared with average housing costs in the United States. The U. S. Department of State furnishes statistical publications at least once per year.

The amount of Quarters Allowance is determined by deducting average cost of U. S. housing (as determined by survey of TWA management employees in Kansas City) from the average cost of foreign housing. The amount by which the foreign average costs exceeds the U. S. average is the employees Quarters Allowance.

3. Foreign Service Premium. Foreign assignment carries with it certain recurring inconveniences and undesirable elements. The transferred employee and his family sever their home ties and adjust to substantially different conditions abroad. Differences in language, cultural life, social, recreation and leisure activities, legal and political institutions, working schedules and conditions, availability of goods and services exist. Although these differences do not constitute measurable hardship, their presence in varying degrees in foreign assignment are considered inconveniences to which an employee will be subjected.

The Foreign Service Premium is established to compensate these elements and is determined as 15 per cent of the base salary for U. S.

nationals overseas in Europe, Central and South America, and 20 per cent for those in the Middle East and Far East.

4. Hardship Allowance. In certain cases of true economic, political or social isolation, a Hardship Allowance is added to the overseas service allowance. Again the amount of Hardship Allowance is usually based on U. S. Department of State evaluation of a particular geographic location. This is a statistical analysis of extraordinarily difficult conditions, excessive physical hardships and notably hazardous conditions for health. TWA pays flat rate hardship allowances from a minimum in Bombay (India) to a maximum in Saigon (South Vietnam).

The following hypothetical example illustrates the Overseas Service Allowance computation.

Table VIII

<u>Item</u>	<u>Hypothetical Amount U. S. \$</u>
Base pay	1,000
Less Tax Equalization Adjustment	<u>100</u>
Net Income	900
Plus Cost of Living Differential	
Post Allowance	35
Quarters Allowance	100
Plus Foreign Service Premium	150
Plus Hardship Allowance	<u>50</u>
Total TWA-paid base income	1,235
Less base salary	<u>1,000</u>
Total Overseas Service Allowance	235

## CHAPTER X.

### THE INTERNSHIP EXPERIENCES

In the opening pages of this paper, it was mentioned that the writer has been participating in an internship program with TWA at its office headquarters in New York City. The internship program that lasted for over eight weeks was a practical training in the area of wages and salaries in general and job evaluation in particular.

The program was intended and designed to achieve the following basic purposes:

1. To provide an educational experience by relating classroom theories with practical situations in management techniques.
2. To familiarize with the overall airline operation and that of TWA in particular.
3. To provide a balance between knowledge and skill by exposing the intern to practical problems in the area of employee compensation.
4. To orient the intern with the fundamental techniques of the particular field of job evaluation and specifically with that of TWA.
5. To provide an opportunity to participate in the establishment of an evaluation plan for Ethiopian Airlines with the assistance of TWA experts.
6. To provide some working experience in the wages and salary determination and administration in general to the intern, who expected

to assume related position with Ethiopian Airlines after graduation.

The following is a description of the activities of the writer in a form of project diary during the above-mentioned period of time with TWA in New York City.

During the first week of the internship, the writer was familiarized with the overall operations of TWA, its organization and administration in general and its wage and salary programs in particular. The writer was soon introduced and familiarized with the fundamental techniques of job evaluation.

In the subsequent week, the writer studied TWA's systems of job evaluation. Concentration was made on the Management Evaluation Plan, described previously. Actual position descriptions were studied and evaluations conducted. The evaluation procedure outlined earlier in this paper has been followed.

One of the features of the training program was the auditing of jobs. This was a process where the writer accompanied job analysts to actual working places of jobs under study, observed and sometimes directly participated in the techniques of interviewing, gathering information and obtaining clarification on certain aspects of the job involved. Both incumbents of positions and immediate supervisors were interviewed at different times. Audit reports for each involved position were written.

Another feature of the internship involved the collection and organization and recording of information--salary surveys--for some specific situations for comparative purposes. In this particular case,

the information concerned medical jobs such as industrial nurses and medical technologists as they related to TWA jobs. Surveys were gathered from private agencies around Metropolitan New York, public hospitals across the nation and the Los Angeles area.

At the end of the fourth week, the writer was flown to Kansas City, Missouri, to get familiar with TWA's overall operations and to observe working conditions. Among the highlights in Kansas City was the visit and observation of the overhaul base with close to 7,000 employees engaged in airframe repair, engine overhaul, plating, painting, fabric shops, radio and electrical repair shops, engine testing room, etc. Observed, too, was the construction of a base for further expansion to accommodate the new Boeing 747's in early 1970.

In Kansas City, too, is TWA's pilots, hostess and pursers training center, where the writer observed various simulations designed to train crew members, while in operation.

The next four weeks were devoted to examining the organizational set up of Ethiopian Airlines.

The management position descriptions were studied, its salary schedules, dimensions, differentials and structure in general were examined.

The study was primarily intended to investigate the ways and means of translating TWA's system of job evaluation plan to that of Ethiopian Airlines, so as to introduce an evaluation plan to the latter organization. This has been a major aspect of the internship experience and will be discussed further.

### Ethiopian Airlines

Ethiopian Airlines was established and started operations in about 1946 with the technical and managerial assistance of TWA. Ever since then, it has remained an associated operation of TWA, i.e., getting the said services under certain contractual agreements.

Today Ethiopian Airlines serves about forty domestic stations (the only airline serving the territory of Ethiopia) and seventeen other international cities in Africa, Europe, Middle East and Asia. It operates a fleet of four jets, including Boeing 707 (the latest commercial aircraft in the air industry) and several other DC aircrafts.

The airline operation engages currently a total of 2,538 employees, with about forty per cent classified as management.

Ethiopian Airlines wage and salary program has the following classifications:

1. Non-Management. This is a wage and salary program that is established through collective negotiations and administered in accordance with the terms of the agreement. It is similar to that of TWA's contract wage and salary set up. All jobs designated as non-management are considered union jobs and hence are subject to negotiation.

2. Management. This is a salary program that covers all Ethiopian nationals in Ethiopia and abroad that includes all administrative, supervisory or professional jobs and any other non-management job. This is our area of interest and will be discussed later in greater detail.

3. Salary Program for Foreign Nationals. The special salary programs in this category are designated as "Salary Programs for U. S. Nationals" and "Salary Programs for Europeans" or non-U. S. nationals. The salary program was developed to attract and compensate accordingly foreign nationals particularly in the area of technical and flight operations. In many, if not all cases, individual contractual agreements are made and the salary program remains a guidance.

4. Ethiopian Nationals on Overseas Assignment. Ethiopian nationals assigned to overseas assignment are covered by the Ethiopian wage and salary program, and the overseas compensation program, that provides foreign service allowance, does so in a manner similar to that of TWA described earlier.

5. Local Nationals. Local nationals in international stations (e.g., Italians in Italy) are covered by separate and individual salary and wage programs developed for each station.

The immediate concern of the airline was to develop an evaluation plan covering most of the management jobs applicable to Ethiopian nationals. The following is an explanation of such a plan.

Ethiopian Airlines at the moment, at least, had not been using any of the analytical methods of job evaluation described earlier in this paper. To introduce an analytical method of job evaluation, TWA's Evaluation Plan for Middle and Lower Management jobs was selected as a plan to suit the needs of Ethiopian Airlines for the following basic reasons:

1. The writer felt that there was no need to develop an entirely new evaluation scheme. An adoption of a well-tried, existing

plan, with some adjustments to suit special needs and conditions of EAL, has obvious advantage. The difficult work of selecting and defining factors and degrees have already been done, and existing manuals provide useful guidance for such operations of rating of jobs.

2. Both airlines, despite considerable differences in size and volume of operations, experiences, background, environment and personnel, have striking similarities in terms of functions, organizational set up and operational problems.

3. The TWA evaluation plan for top management was considered inappropriate, as it involved system group heads or major department heads, who are, organizationally speaking, comparable to the major department heads jobs which were not covered by the management salary program of EAL.

4. The TWA non-management evaluation plan was considered as irrelevant to EAL, since in EAL all non-management jobs are subject to negotiation, established and administered by union-management agreement, are out of the scope of job evaluation, at least in this particular situation.

5. The TWA plan for evaluating sales, foremen and general foremen jobs, on the basis of statistical review, was considered as not an immediate concern for a small organization like EAL, nor a plan warranting any study.

Accordingly, the writer concentrated on the Middle and Lower Management position evaluation plan. The job descriptions of about forty management jobs of EAL were studied. Twenty-five of these jobs were considered as key jobs and were closely studied in greater detail.

Each of these jobs <sup>4/25</sup> were rated using the TWA Management Job Rating Sheet (sample appears in Appendix C) and points allotted on the basis of TWA jobs (at least four TWA jobs, with different salary grades were used for guidance in allotting credit to each factor in each job).

The process of translating the selected TWA evaluation plan to that of EAL is yet to give rise to one of the critical problems experienced in the internship program. The current EAL Management Salary Program consists of about 250 different jobs classified into 25 salary grades. The differentials between two salary grades varies slightly from less than five per cent at the minimum in lower classification to eight per cent at the maximum in the higher classification. The dimensions (i.e., spread between the minimum and maximum of a given salary range) is 75 per cent of the range minimum. Furthermore, there is considerable overlap between salary grades. In contrast, TWA, as mentioned before, maintains a minimum differential of eight per cent between salary grades and only about 34 per cent dimension.

The point band shown in Table VII has been developed by TWA to fit a salary program with 18 classifications and translating the point band to fit the EAL salary program, with 25 classifications, left us with the following alternatives:

1. The TWA point bands may be expanded to accommodate the 25 salary classifications.
2. Elimination of at least four salary grades in EAL and thus reducing it to 21 classifications was considered possible in view of the fact that some salary grades did not have positions assigned to them,

and the others had a maximum of two jobs. The expansion of the point band still becomes necessary, but it involves lesser difficulty and greater possibility of maintaining direct relationship between point bands and corresponding salary grades.

3. Restructuring the EAL salary scheme and reducing it to 18 classifications and applying the TWA point band without any modification.

4. Develop a new point band.

Alternatives 1 and 4 were considered inappropriate and rejected on the grounds that:

Alternative 1 suggests redevelopment of TWA point bands established to fit 18 grades, to 25 grades to fit that of EAL. Expanding the point band by such magnitude would make it difficult to develop a point band directly proportional to the grades, difficult to maintain consistency and understanding of the job levels, and infinitely complex to determine the point allocation.

Alternative 4 suggests development of new point bands totally different from that of TWA. Such a plan leads ultimately to a development of a scheme without the benefit of a well-tried system, without the benefit of using TWA jobs, point allocation, etc., and hence requiring unnecessary effort.

Alternative 2 suggests elimination of the unnecessary four salary grades and reduces the classifications to 21. The following table illustrates the situation. The salary grade numbers and figures are hypothetical.

Table IXEthiopian Airlines Management Salary Program

<u>Present</u>			<u>Modified</u>		
<u>Salary Grade</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Salary Grade</u>	<u>Minimum</u>	<u>Maximum</u>
1	200	350	1	230	402
2	-	-	2	240	420
3	220	385	3	250	438
4	230	402	4	265	460
5	240	420	5	275	481
6	250	438	6	288	503
7	265	460	7	300	525
8	275	481	8	320	560
9	288	503	9	340	595
10	300	525	10	360	630
11	320	560	11	380	665
12	340	595	12	400	700
13	360	630	13	425	744
14	380	665	14	450	787
15	400	700	15	475	831
16	425	744	16	500	878
17	450	787	17	550	962
18	475	831	18	600	1,050
19	500	878	19	650	1,137
20	525	919	20	700	1,225
21	550	962	21	750	1,307
22	575	1,005			
23	625	1,094			
24	675	1,181			
25	725	1,269			

Source: Ethiopian Management Salary Program (Confidential Document).

In the modified salary grade of 21 classifications, the lowest three grades were eliminated and a new minimum has been established. But the elimination of salary grade 20 requires making adjustments in the

minimums of the remaining highest levels (21-25) to maintain consistent differentials. Although some increase in cost to the company may be expected due to the raising of the minimum in some grades, it can safely be assumed that incumbents in those positions are close or above the minimum of the new classification and hence may not pose any problems. With this in mind, the TWA point bands were redeveloped to fit the new 21 classification. With the point band developed, at least fifteen jobs of EAL were evaluated on the basis of TWA jobs for comparative guidance. The evaluation result was related to the modified 21 salary classifications plan. The corresponding minimum salary was compared with the already existing minimum salary of EAL for the position. Some indicated considerable differences between the existing and "evaluated" level of pay, but all showed that the evaluation rated jobs consistently below the current level of pay. The implications were that such differences reflect discrepancies in the application of the TWA system to that of EAL or existing EAL plan is out of line. That some jobs could be out of line was to be expected in a salary program that has been developed without the benefits of analytical job evaluation methods. But no immediate answer could be given to this consistently "under rating" situation.

The evaluations were re-checked, re-worked in certain cases, and refined. Different point bands (Table VIII was modified) were developed, but the evaluation showed no significant change in relating its outcome to the existing salary structure of EAL. The expansion of the point bands into 21 salary classifications and evaluating positions

on that basis has been finally discarded as unworkable.

1. Expanding the TWA point bands into 21 classifications is nothing more than introducing more arbitrary judgement into an already arbitrary plan in view of the fact that TWA jobs were used for comparative purposes.

2. Expanding the point bands into 21 grades makes it more difficult to see relationships between TWA job levels and make comparisons of these relationships between EAL jobs. For instance, if there are two levels of salary grades between an Account Executive and Senior Sales Representative in TWA, there might be (after application of evaluation) three levels between these two jobs in EAL. It becomes difficult to account for the differences in the system.

3. It might entail certain discrepancies that may not be easily detectable for adjustment.

Alternative 3, with three alternatives considered infeasible or at least unsatisfactory, the alternative that remained to be tried was the one that suggested maintaining the same point band developed by TWA without any modification or change, but make adjustments or even radically change<sup>in</sup> the salary structure of EAL to compress it into 18 classifications.

In this new attempt, the writer developed new salary structure that not only solves the problem to an appreciable degree but also introduces new elements that may make the salary structure more rational and systematic.

Table X which follows shows one such attempt as it relates the TWA point band to a new salary scheme. All figures are hypothetical.

Table XModified Salary Structure for Ethiopian Airlines

<u>Actual TWA Point Band</u>	<u>EAL Salary Grade</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Approx. Diff.</u>	<u>Approx. Dimension</u>
0- 230	1	200	320 )		
231- 252	2	220	352 )		
253- 277	3	240	384 )	10%	60%
278- 305	4	260	416 )		
306- 335	5	285	436 )		
336- 367	6	310	511 )		
368- 405	7	335	552 )		
406- 445	8	365	605 )	9%	65%
446- 487	9	400	660 )		
488- 535	10	435	708 )		
536- 588	11	470	799 )		
589- 646	12	500	850 )		
647- 711	13	540	918 )	8%	70%
712- 784	14	580	966 )		
785- 866	15	625	1,062 )		
867- 959	16	670	1,172 )		
960-1064	17	720	1,260 )	7%	75%
1065-1182	18	770	1,315 )		

This new modified salary structure is a proposal or suggestion that can be further refined, remodified and altered to suit certain conditions that might exist, which the writer has been unable to detect. Given the limitations that may appear in the scheme, even now, in its unrefined state, it provides many advantages.

At least twenty-five jobs in EAL were evaluated and the total points related to the corresponding salary grades. Then the results were compared with the existing levels of pay for these jobs. More than ninety per cent of the jobs evaluated confirmed to the existing level of pay as modified by the new structure.

The following advantages are provided by this new modified salary structure:

1. It recognizes 18 salary grades only, thus making application of TWA point band plan simpler.
2. It also provides administrative simplicity by reducing the number by seven grades.
3. It establishes differentials of at least 10 per cent between two salary grades at the low levels to at least 7 per cent at high levels. The 7-10 per cent differential will have more meaningful effect on the promotion of position incumbents than the previous case, where such differential has been considerably low. The differentials decrease (percentagewise) with increasing value of job, since amount of pay at high level is large enough to allow large differentials in actual figures; thus, reduced percentage with increasing dollar value keeps differentials within reasonable limits.
4. It establishes dimensions ranging from 60 per cent at the low levels to 75 per cent at high level, the dimension being maintained at an increasing rate of 5 per cent as it ascends to higher classification. The rationale behind this is that:
  - a. It allows enough progress within a range for merit increases. The greater spread at higher level corresponds to the larger amount of increase at the higher classification for the same percentage of merit increase.
  - b. The greater spread at a higher classification also allows progress within a range as normally incumbents at higher levels

have less chances of promotion and may have to remain in the classification for several years. Obviously, adjustment in range maximum can be made any time as desired.

5. The new structure allows overlap but not as excessive as the previous one. For instance, the previous structure (refer to Table IX) establishes the maximum of salary grade 1 at \$350 which is above the hiring minimum of salary grade 12. In other words, it is possible that an incumbent of a position in salary grade 1 may be paid higher than an incumbent of a position rated at 11 salary grades higher, a situation that defies the purpose and philosophy of job evaluation. The new structure establishes the maximum of salary grade 1 at lower than the minimum of salary grade 7. The overlap may be considered as one within reasonable limits. Excessive overlap, however, conflicts with the objective of job evaluation as jobs placed in very different grades may be paid the same rates even though in the process of job evaluation they were valued differently.

6. The new structure by establishing new minimums, raises the old minimum of several jobs. But it is unlikely that any would have significant effect on additional company cost, since most incumbents will be closer or higher than new minimums.

This is the summary of the activities of the writer during the eight-week training program with TWA in New York City.

## CHAPTER XI

### GENERAL CONCLUSIONS

#### The Problems of Analytical Job Evaluation<sup>24</sup>

In the previous chapters, we have discussed the basic methods of job evaluation and have attempted to illustrate its applicability through presentation of practical examples in TWA. In this chapter, the technical and economic aspects of salary determination will be presented.

It has been pointed out that job evaluation is a means of determining salary differentials that are acceptable as fair and equitable, within the constraints of the external environment. It has also been shown that job evaluation aims at insuring a fair salary structure by comparing and to some extent measuring demands made upon holders of different jobs and by establishing a hierarchy of jobs for salary fixing purposes.

Yet, the process of salary determination has been subjected to serious objections and criticisms. It has been said that the idea of determining salary differentials in terms of "equity" is altogether ill-conceived. It has been argued that relative pay, like relative price for commodities, ought to be determined by the relative supply and demand for various types of labor, i.e., by economic factors. Any

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<sup>24</sup>. The theoretical part of this discussion is based on I. L. O. "Job Evaluation," pp. 47-72.

attempt to substitute ethical considerations and purely technical factors for these economic aspects is bound to cause serious difficulties.

An author<sup>25</sup> pointed out that a job evaluation plan introduced in the aircraft manufacturing in Southern California established a different measure of the worth of a job instead of its price, determined by the market, only to encounter continuous obstacles and inconsistencies in the administration of the plan due to conflicts in standards. The same may be said of TWA industrial nurses and medical technologists, and some other medical related jobs, whose administration has been found to be difficult due to inconsistencies between internal evaluation plans and the external market conditions.

Another critic although admits the rationalization of job evaluation in its determination of relative ranks of jobs at time of its introduction poses these questions:

How long can this situation last, how long can the enterprise accept with confidence the value relationship of jobs originally established by the plan; are there any indications that this initial value relationship will be disturbed and become outdated? The answers to these questions depend mainly on the degree of economic change operating in the economy and the industry of which the enterprise is a part.

Job evaluation, as we know it today, makes no provision to meet these dynamic processes so prevalent in our economy. All the existing plans, whether simple or complicated, whether technically sound or otherwise, have up to now lacked a method by which external or internal changes and structural adjustments can be automatically incorporated . . . As a result of the technical limitation, all existing plans retain the initial job value structure throughout their operation. Trying to solve this problem of

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25. Clark Kerr and Lloyd H. Fisher, "Effect of Environment and Administration in Job Evaluation," Harvard Business Review, XXVIII No. 3 (May, 1950), p. 81, in I. L. O., p. 47.

change in a piecemeal fashion, certain "emergency" measures are introduced . . . Where a discrepancy seems serious or where economic change affects the labor market so that the supply of a particular skill is threatened, special bonuses are paid to retain or attract employees. This step is always taken in the expectation that the disturbance is of short duration and things will return to "normal" again. If in the meantime more jobs show similar signs of manpower scarcity, the same piecemeal solution is adopted . . .

The main weakness of job evaluation is that it cannot adjust adequately and successfully to the dynamic elements of our economy as they affect the process of wage determination. In the long run, in spite of "emergency" adjustments to change, under the impact of the dynamics of the labor market, the whole job evaluation structure will disintegrate and collapse.<sup>26</sup>

These are severe criticisms that cannot be disregarded in the establishment and subsequent development of a job evaluation plan. However, the discrepancies that job evaluation may be said to have should not blind us from understanding the true nature of the evaluation system. The argument that "the price of a job in the market is a well established measure of its worth" cannot be taken for granted without being challenged. The validity of such an objection is open to serious question, if only because for many jobs there is not a "market price" that is easily assessable. The process of pay determination cannot easily be compared with the process of price determination for commodities. For certain classes of jobs, the market may determine a lower limit below which pay cannot be set; but it does not set a well established price. Even this lower limit can be difficult to define; for workers

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26. L. G. Nicolopoulos, "Formal Job Evaluation and Some of Its Economic Implications," Research Report I (Montreal: McGill University, 1954), pp. 36-41, in International Labor Office, "Job Evaluation," p. 47.

may accept offers below the market price in an organization where prospects of promotion are bright or working conditions pleasurable.

Furthermore, for some group of jobs, market price becomes even more difficult to assess. Usually, a market is of minor consideration for jobs which are filled through the process of internal promotion.

Although the discretion for determination of pay in some jobs may be larger than for others, as determined by what others pay, the problem of reconciling the forces of demand and supply with that of job evaluation hardly exists for jobs with no clearly determined market prices.

It is to be admitted that the price for certain jobs might be so strongly determined by the external market (such as Senior Sales Representative). Furthermore, it is also conceivable that factors to be rated in certain jobs might be of an unusual or elusive nature, that the jobs could not possibly be incorporated into the job evaluation plan. The poise, charming personality, and beauty of flight hostesses may not be possibly rated satisfactorily. Few special jobs that may not fit into the plan can be excluded. To be sure, the existence of such exceptional cases does not in any manner invalidate a job evaluation system. A system that affords suitable basis for any substantial part of the labor force, or group selected, in a particular enterprise can be regarded as feasible.

Another issue that has been objected to in job evaluation is that of changes in job contents and in the supply and demand for a particular skill in the labor market. Certainly such changes take

place and many of them cannot be absorbed automatically in a system of job evaluation. However, it must be borne in mind that job evaluation as a device of determining relative pay, does not prohibit the normal practice of periodic review of salary structure. Indeed, job evaluation is an integral part of the salary review process.

Individual jobs may have to be reviewed and regarded; the monetary worth of points may have to be changed and some other adjustments may have to be made from time to time. There is no indication that the application of job evaluation necessarily makes the salary structure more rigid than one developed without it. Indeed, job evaluation permits such adjustments to be made on a rational basis and in a logically consistent manner with regards to the whole salary program.

Finally, a new method of operation may demand a specialized skill that may not be acquired through in-service training, but has to be recruited from the external environment at a salary rate that may not be reconciled with the company's job evaluation plan. Yet it is by no means evident that such situations are neither frequent nor significant. Obviously, this again does not invalidate a job evaluation plan, for a considerable variety of jobs can still be determined by the process.

To criticize job evaluation on the grounds that it is incapable of eliminating conflicts between technical and economic factors is to claim that job evaluation must solve all existing problems of pay differentials. To reiterate again, it can be claimed that job evaluation can be applied to a majority of jobs and this is useful enough to justify its introduction and maintenance, and the difficulties of

technical and economic factors can be kept within manageable limits.

Problems Related to Differences in Factors, Degrees and Weights

The point rating system applied in some industries differ. Criteria used differ. The selection of factors, weights and degrees vary between two plans in different firms. Such differences have been open to serious question as they are considered evidences of inconsistencies and contradictions in evaluation plans.

An author contended that in a certain evaluation plan developed by a committee, there were ". . . as many different opinions as to what those weights should be as there were people on the committee. But invariably some sort of compromise was achieved by a pooling of their relative opinions. The very fact that they do not all agree to me is evidence of the fact that there is no weighting that is specifically correct."<sup>27</sup> The argument is that if large differences are made in weights assigned to the different factors, they may result in significant differences in the ranking of jobs.

Another objection that has been directed to weighting is the assumption implicit in analytical methods, that "valid total scores can be obtained from the sums of the scores for the individual factors, weighted or unweighted." The assumption has been challenged on the ground that "it is based on the unverified assumption commonly made . . . that the effects of the pertinent factors is additive . . . This assumption

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27. H. B. Rogers, "Proceedings at the 18th Annual National Time and Motion Study and Management Clinic," (Chicago: Industrial Management Society, 1955), p. 80, in I. L. O. "Job Evaluation," p. 54.

implies in turn that those factors are interdependent."<sup>28</sup>

Again, it has to be emphasized that the purpose of job evaluation is the establishment of a more equitable and acceptable internal salary structure. It intends to correlate relative pay and relative job contents and thus provide a satisfactory salary structure, able to settle certain disputes by means of a systematic framework. In this case, then, the application of different factors and weights in different business concerns can hardly constitute a basis for serious objection.

If differences in the ranking of the same jobs occur due to different systems and different evaluations, such differences are acceptable as long as we do not regard job evaluation as a purely scientific undertaking dealing with the search of objective truth.

The examples and descriptions given are indicative of the fact that job evaluation, at least at its present level of development and application is not a scientific discipline.

"Job evaluation can be regarded as being 'scientific' only to the extent that it treats its problems in the 'spirit of science,' that is an ordered and systematic fashion."<sup>29</sup>

When an enterprise intends to apply the method, the scientific system to be adopted and particularly the choice of factors and weights, are questions of normative judgement, not of scientific truth.

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28. Sebastian B. Littauer and Adam Abruzzi, "Experimental Criteria for Evaluating Workers and Operations," Industrial Labor Relations Review, II No. 4 (July, 1949), p. 512 in I. L. O. "Job Evaluation," p. 54.

29. IX<sup>e</sup> Congrès International de L'Organisation Scientifique, I (Bruselles, 1951), p. 2 in International Labor Office, "Job Evaluation," p. 55.

Furthermore, if job evaluation is to be considered as a means of systematically discussing relative salary rates, the issue of whether factor ratings for a particular job can be added or not is unlikely to have serious effects than might appear to be regarded.

Certainly job evaluation involves complex and challenging questions that remain unanswered. It even raises highly nebulous and philosophical issues such as equity, value, psychological job characteristics. At the moment at least job evaluation is not concerned with such issues, and for its restricted purpose, it has been quite a useful device despite its limitations.

Problems of Rating. The rating of jobs is the process of ranking them after necessary comparisons have been made with each other through reference to the definitions regarding the factors and degrees. It is often argued that rating must reflect a high degree of accuracy. The basic problem encountered in rating jobs is that there are few or no yardsticks for determining the degree of the various requirements of a job.

Physical exertion can be measured for instance by weights of objects handled. But these are few cases. In most cases, objective means of determination are limited and in certain cases, such as 'mental effort' they are virtually non-existent. Thus, rating is a matter of estimation.

Furthermore, the process of rating involves mistakes that are committed in most cases. The following are some of these common errors:

1. Halo Effect. This is a tendency to assign a high or low rating to many factors of a job for no reason other than simply because the first or the most important factor was so rated.

2. Central Tendency. This is hesitating to assign high or low points to most factors because of the tendency to rate them at average, mid-points on the scale.

3. Leniency. This is a tendency to assign high rather than low value, probably because of being uncertain, or to avoid altogether giving low values to individual factors or the jobs in general.

4. Harshness. This is the reverse of leniency, where low rather than high values are assigned either because of uncertainty or to avoid altogether assigning higher values to each of the factors or the jobs themselves.

5. Bias or Prejudice. This is a situation where rater involves his preconceived ideas or judgement or other influences distort the rating value.

The Grading of Jobs. Our example in TWA and EAL indicate that jobs are grouped into grades. Such classification of jobs into grades may be justified for a number of reasons.

1. The determining of a separate rate for each point score assumes that a high degree of precision and accuracy has been reached by the method of job evaluation. And at the present stage of application, job evaluation is incapable of meeting the assumption.

2. It also suggests that an employee, who may perform different jobs with slightly differing point values, would have to be compensated

by different pay scale every time he makes a change from one job to another. Payment of the same rate for a group of jobs with similar point values eliminates such a problem.

3. It is conceivable that reduction of the number of different pay rates would lead to reduced cost in pay administration.

However, it is possible that difficulties may crop up if pay differentials between grades are large. Position incumbents will make every effort to show that they should be classified in higher grades. Furthermore, it is possible that some may fail to understand why they are paid the same rate, when their job has been shown and recognized as being more 'difficult' or has more responsibility than others. It may not be easy to challenge such criticisms if the idea of job evaluation is to establish appropriate pay differentials.

There are other questions in connection with job grades. There is the question as to whether the compensation for all jobs in individual grade is to be established as a single rate or a rate range with minimum, maximum or average rate. It must be borne in mind that it is not necessary to establish uniform rates for all different jobs in one given grade. Differing rates can be established depending on the job. Single rate fixing provides administrative simplicity. It has, however, the drawback that it does not permit scope for rewarding differences in performance and length of service, nonconsideration of which may cause discontent among employees with longer experiences and loyalty.

To be sure, these are issues beyond the scope of job evaluation and the problems are those related to the remuneration of persons rather than jobs.

### Theory and Practice

Although pay programs may vary considerably between companies, there are certain basic considerations that are common to the establishment and maintenance of a sound program. The following will be a discussion, both theoretical and practical, in order to examine the rationality of TWA's salary program as determined against established measuring yardsticks or standards developed in most books.<sup>30</sup> Of these criteria, at least three are considered extremely important and will be thoroughly discussed.

1. The Internal Relationships of Jobs. The pattern of the relative pay rates of jobs is considered a criteria for determining the rationality of salary structure. It is generally believed that employees compare their pay with that of their fellow workers, superiors and subordinates. This state of affairs is said to be not only natural but the easiest method of income comparison. When they see inequities, they tend to feel underpaid, suspect favoritism and probably lose confidence in the salary program. They attach great importance to the question of 'equity,' which is judged mainly by comparative job contents, either in terms of difficulty of working conditions, degree of responsibility, or qualifications demanded by the job. They are deeply interested in comparing their present with their former jobs. They compare their own tasks and corresponding rewards and prestige with that of others. They

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30. John A. Patton, Stanley A. Self, and Littlefield, Job Evaluation - Text and Cases (Homewood, Illinois: Richard D. Irwin, Inc., 1964); Michael Jucius, Personnel Management (Homewood, Illinois: Richard D. Irwin, Inc., 1967), Robert E. Sibson, Wages and Salaries (New York: 1967).

remain strongly opposed to any differentials in pay, unless they understand the justification and convincing reasons for such differences.

Obviously the comparability between some jobs are more evident or direct than between others. The degree to which the contents of jobs can be easily observed makes precise comparison possible. It is more difficult to make comparisons between a large variety of groups of managerial, clerical or manual jobs than between jobs within each of these groups, between different sections than within a given section.

TWA strives to maintain fair and equitable pay relationships among jobs in the company, reconciling internal factors by determining the relative ranking of jobs through the process of job evaluation, described earlier. We have shown that the evaluation procedures in TWA call for the formal descriptions of jobs, review, analysis and rating of jobs item by item and ranking them in relation to other jobs in the company. Any new or changed job is subjected to this scrutiny and its position determined in relation to other jobs. Thus, it is claimed that the job evaluation plans maintain the desirable relationships between jobs and pay rates as well.

But such an assessment of the internal relationships between jobs is an oversimplification of the true situation in TWA. In a large industrial enterprise like TWA, the situation is complicated by the variety of jobs.

As in many industries, the highest paid jobs, which would be expected to raise even more serious questions regarding fairness and equity, have hardly been subjected to comparative job evaluation analysis.

They are regarded as being too complex for job evaluation plans, as the plans may not do full justice to the requirements of these top jobs. It would be absurd to argue that such jobs do not lend themselves to any type of rational analysis. Further studies may reveal that the true nature and significance of professional qualities that are regarded as completely impossible to be described, analyzed and evaluated may be found to be smaller than is now assumed.

Of immediate concern here is TWA's maintenance of internal relationships of jobs, particularly those which are non-management but non-contract and those of non-management but contract, or unionized. For instance, how does TWA establish and maintain pay relationships among employee groups--Reservations Agents, City Ticket Office Agents, Transportation Agents, teletype operators, and cargo agents or ramp service men--which involve close operational relationships of three non-union groups and two union groups? We have mentioned earlier that agreements between the company and at least six unions are signed. Some of these agreements last for a period of three or four years, others only for a year. Some of these agreements provide a large pay increase over an extended period while others provide for several small increases within a shorter time period, thus changing pay rates every three or four months for certain groups of employees.

The Reservation Agents and City Ticket Office Agents work closely with the unionized teletype operators and Transportation Agents work closely with unionized ramp service men and cargo agents. The maintenance of appropriate relationships between these groups of employees

is not simple. Adjustments of non-union jobs as the pay rates for union jobs changes is a difficult task. Even more difficult, is the job of a supervisor, who may have subordinates under his jurisdiction belonging to each of the three union groups or even more under certain cases. Changing his pay, as the pay of one group changes, is neither possible nor sound. Changing the pay rates of the Reservation and City Ticket Office Agents as that of the teletype operators change would lead to later adjustments again every time the cargo agents and ramp service men pay scales change. In essence, this means that the Reservation and City Ticket Office Agents would be given two sets of increase, with each of the two union pay scale adjustments.

One of the methods that TWA attempts to overcome this situation is through constant observation of all union groups, not the closely related agent or non-union group alone, with all non-union employee groups. Such a method insures that non-union groups as a whole get fair and equitable pay in relation to all the union groups.

Studies pertaining to such internal relationships between union and non-union jobs are periodically made. They are even conducted in relation to the external environment (mainly in the airline industry). Such a study was made to determine developments concerning teletype operators and reservation agents. It was learned that the minimum and maximum pay rates of teletype operators and reservation agents had an upward trend, generally moving along very much together.

The pay relationships between agents and supervisor is determined by maintaining the minimum percentage differentials. Thus TWA through

its developed system of job evaluation, constant studies, observation and reviews, strives to maintain desirable internal relationships between jobs.

2. External Factors. It is claimed that employees are sensitive about pay in comparable positions in other industrial enterprises, a situation that affects employee attitudes and the company's ability to attract and retain competent personnel.

It is believed that generally speaking, at least the pay rates for certain particular jobs cannot be much lower than those paid for similar work in other industries. Otherwise, the low pay rate will create employee dissatisfaction, result in excessive labor turnover, high costs of training and other unfavorable effects. It is equally believed that what a company pays cannot be too high as compared with other firms in the industry. Otherwise such a condition would involve unnecessary pay expenses contrary to the principles of sound business management.

Therefore, there are substantial and important relationships between the pay rates of an individual company and the external market. However, such relationships cannot be regarded to mean that the market situation dictates the precise rates which the firm would be forced to pay. It rather means that the market sets the upper and lower limits beyond which the firm's willingness to vary will be restricted.

Furthermore, studies have shown that this range of discretion within which a company can determine its pay rates as compared to those

paid in other firms is wider for some jobs than for others.<sup>31</sup>

It is also contended that a firm's ability to recruit and retain desirable personnel depends mainly on the actual labor mobility and response to pay differentials. Although labor mobility may sometimes be a question of mentality, it is generally assumed that persons are not willing to move to a new job for financial benefits alone unless such benefits are large enough to offset natural reluctance to change, as well as other reasons for staying in one's job; such benefits as seniority, security, pension, and so on.

The opportunities for changing jobs are often affected by other factors, too. A person's accumulated knowledge and experience is usually of less value to a new employer, especially in jobs other than the lowest pay. Furthermore, many firms have the practice of filling high paid jobs through internal promotions of existing employees than through recruitment from the external market.

Thus, it has been pointed out that the number of "hiring jobs" tends to be quite limited, such jobs, moreover being often concentrated at the lower end of the pay scale.<sup>32</sup>

At the same time, persons entering the labor market, who normally qualify for hiring jobs, are often attracted by higher rates more easily than those in more established positions.

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31. Dunlop, et al, in George W. Taylor and Frank E. Pierson, eds., New Concepts in Wage Determination, (New York: McGraw-Hill, 1957), p. 127.

32. Edward R. Livernash, in Taylor and Pierson, pp. 144-145.

Other factors also affect a company's discretion in determining rates as compared to those of other firms. During periods of labor shortage, the range of discretion becomes narrower than periods of noticeable unemployment. Whatever the situation, there will be normally some rates that are determined subject to the external environment and the company's discretionary power is restricted to a considerable degree. Thus the lower limits of certain particular jobs are beyond the control of the company since they are necessarily fixed in the company's internal pay structure, regardless of whether or not it is compatible with the company's idea of fair remuneration for the jobs concerned.

TWA considers remuneration provided for comparable jobs in other industrial business in determining and maintaining its salary structure, as fair and equitable. It strives to relate its compensation to the outside market by considering not only what other airlines are paying but what other industries are paying.

Previously, TWA used the Consumer Price Index as a guidance in determining the salary levels. It often adjusted its pay rates by the amount that the Consumer Price Index changed. The rationale behind the application of this criterion was that the Consumer Price Index was regarded as an indicator of the amount of inflation and increased cost of necessities. Hence it was believed that the amount of pay rates must increase to keep employees maintaining their purchasing power through added income to offset inflated prices. But it was learned that pay rates have increased at a greater and faster rate than the cost of living index. TWA, no longer directly uses the Consumer Price Index in determining pay levels, as the information concerning cost of living is

incompatible with salary increases.

Instead TWA uses a system that is known as Salary Survey to check and find out what other airlines and other companies are paying to comparable jobs. The Wage and Salary Staff studies and analyzes continually the pattern and changing conditions of the labor market in order to adjust the company's non-contract salary structure to the industry trend.

Information is gathered from wide surveys of market in which some institutions participate. Very specific surveys of particular jobs or groups of jobs are conducted if found necessary or desirable. When all available information on comparative salary levels are gathered, averages are developed and a salary structure will be established with the use of these averages as standards of ranges. Normally the standards will be put at several percentage points ahead of the market average to avoid the necessity of frequent adjustments. Adjustment for a particular job or group of jobs sometimes makes it necessary to make corresponding adjustments in other jobs or classifications to maintain the proper internal relationship.

Salary Surveys are analyzed in terms of job descriptions rather than job titles. This is due to the fact that two jobs in two different companies may bear the same title but have considerable differences in job contents. Furthermore, normally jobs in which there are several occupants are studied. This is to avoid the hazard of considering a job having only one occupant, for such a position may be created specifically for a particular individual under unusual circumstances.

Salary Surveys take into consideration some other factors as well. Such surveys consider the number of hours worked, paid vacations, holidays, sick leave pay and other benefits that ultimately make up an employee's compensation. For instance, it would be misleading to assume that a pay at \$100 per week for 35 hours work in TWA is identical or equivalent to a weekly pay of \$100 for 40 hours in another company.

TWA conducts two basic kinds of surveys periodically. These are surveys among trunk airlines and surveys among other industries. Primarily TWA is interested in surveys concerning pay rates in other airlines and how its pay rates compare with the airline industry in general.

For the past several years, the four largest trunk airlines\* have compared jobs and exchanged salary information at least twice a year. Job analysts from each company meet, review the jobs of the four carriers and select those jobs which are similar among all four airlines and those jobs which can be even more precisely compared among two or three of the airlines. Then information pertaining to salary ranges, average salary paid, number of incumbents are exchanged for these selected jobs.

It is often found that of all TWA non-management jobs, about half are comparable with jobs in other airlines, and this group of jobs constitutes a considerable part of the labor force of the company. A chart was developed to show the average salaries paid by each of the four carriers in the same compared category of jobs, reservation agents, in this instance.

\* These include United Airlines, Pan American Airways, American Airlines and TWA.

It was revealed that the pay increases for all the four airlines in a ten-year period moved along about the same trend. It was found that at one time one carrier paid the highest, and at other times, another paid the highest, without any intention of one carrier to pay much higher than others, as each wanted to remain competitive. They sometimes clustered close together and separated again. The fluctuation has been due to the fact that each had different problems, made adjustments on different dates, used slightly different evaluation plans, or had different salary relationships.

Furthermore, apart from comparing pay relationships between management and non-management jobs, comparisons are often made among these four airlines and other U. S. trunk carriers in each of key jobs.

Although TWA is basically concerned with comparisons in the airline industry, it also considers the general market trend in order to learn the position of the airline industry in pay scales in general. In the general industry market, TWA participates in surveys conducted by the Commerce and Industry Association of New York. TWA, as a member of this organization, actively participates in exchanging salary data with 410 companies. It also participates in other surveys involving various kinds of management and supervisory jobs. One such survey comes in five volumes, and one volume reports on 19,000 first-line supervisory employees in 202 U. S. companies.

TWA also checks periodically its key jobs with those of many of the surveys to learn how its structure matches these markets, job by job, city by city. Thus TWA maintains its salary levels at comparable market rates.

The third principle in salary administration is the recognition of individual performance and compensation thereof. TWA recognizes the productivity of individual employees through its system of merit or promotional increase. In other words, the system rewards a person who does an outstanding or better performance than others in his job. The company defines merit increase as an "increase in the current salary of an employee because of improved proficiency within his position or for performance in his assigned position at a level better than is normally expected." The measurement of the amount of improvement or degree of high performance to determine merit increase is, however, dependent upon the individual judgement of supervisors. Merit increases are normally granted on the basis of performance review measured against predetermined goals or standards. Some sections have developed their own performance rating devices. Most, however, use a performance rating form developed for all sections as a basic guide for review and discussion. In certain areas of activity, such as reservations, specific job related appraisal items are developed as standards to be attained. Some items mainly include volume of calls, calls converted to sales, volume of total sales, effect on passenger handling, etc.

Some supervisors grant high and some low merit increases for almost comparable performances. To minimize this inconsistency and to provide guidance for supervisors in determining amount of merit increase, a minimum percentage increase has been established, i.e., merit increases for management employees amounts to no less than a minimum of five per cent of the current salary unless the full five per cent places the

employee's salary above the range maximum for the job.

Service increase for non-management is granted on the basis of salary progression, on a time schedule basis until employee reaches the maximum of a range.

Another benchmark for a salary program is the establishment of policies and procedures governing salary administration, to provide guidance and restraints in making daily decisions and solving problems. TWA's Wage and Salary Division, its corporate staff and regional field personnel, study and develop policies and regulations governing pay administration. Extremely elaborate policies and procedures covering almost all aspects of wage and salary program establishment of position, its evaluation, merit, service, demotion or promotional increases, special salary adjustments, new hires, rehires, special salary programs, overseas compensation and other areas of salary administration are incorporated in the company's Management Policy and Procedure Manual.

Communication of Information. TWA communicates the necessary pay information to supervisors either directly by the corporate staff or through Regional Industrial Relations Representatives.

Records. TWA maintains records of jobs for intelligent pay decisions. It maintains job files for each non-contract job in alphabetical order. It contains job descriptions, job rating sheets, and any other relevant document pertaining to the job, from the moment the job has been established.

The Ethiopian Airlines Salary Program in Perspective

The final step, that of translating the evaluated job structure into a new salary structure is a decisive one, for the whole operation must result in an acceptable fashion of pay differentials. The difference between the old and new pay plans need to be acceptable not only to a substantial majority of employees but to the company's financial position as well. The new structure cannot be regarded satisfactorily if it completely upsets existing relationships. In other words, the new structure will have to reflect to a great extent the old structure.

When all jobs have been rated and their rankings established and the pay determined, the final process is that of changeover from old to new structure. Some problems are expected to be encountered in the transition stage.

Red Circle Rates. These are rates above the maximum of the given job classification. The problem created by jobs classified and paid more than the salary structure would justify may be dealt with in certain ways. Reducing the rates to the appropriate level would be a painful operation and would not be desirable as it results in employee discontent. That is why the introduction of job evaluation is expected to involve an overall pay increase, as some rates are raised and none are reduced. However, reductions in rates may be made unnecessary by:

1. Freeze the salary increases of the concerned position incumbents for some time. This will partly offset differences between old and new rates.

2. Reduce differences between old and new rates on the basis

of extended time period.

3. Consider the possibilities of promotion and transfer within reasonable limits.

4. Unless the financial burden of maintaining the amount of overpaid jobs is large (the old structure must be inefficient) maintain the old rate until the position is vacated by the incumbent. Consider the amount of overpayment as what Lytle said, "the penalty of earlier mismanagement."<sup>33</sup>

Another problem to be expected is that some jobs may not fit into the new salary structure. Certain jobs may have been rated too low either in terms of external environment or established internal structure. In such cases, further adjustments may be made by re-evaluating the jobs and, if necessary, raising its point value. If not, the possibility of changing its job contents to add some elements that may raise its point value, without introducing discrepancies into the evaluation plan, may be considered. If any method does not prove satisfactory, the job may be left out of the scope of the scheme.

#### Conclusion

A modern executive is becoming heavily dependent on new decision making technology. Many decisions that govern day-to-day operations are increasingly being delegated to new methodology, and business management has become more professionalized than ever before. Difficulties remain,

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33. Charles W. Lytle, Job Evaluation Methods (New York: Ronald Press Co., 1954), p. 295.

however, even if the potential effectiveness of a new method is recognized. Fear of the unknown, reluctance to disturb the status quo, threat of disrupting particular interests, high initial cost often lead to active resentment of the new method.

However, the trend is clearly in the direction of change because new methods, when competently used in the proper context, are feasible and usually are superior over past performance.

Job evaluation is one such methodology. It constitutes a device for the rendering of certain decisions concerning pay problems. It is a useful managerial technique inasmuch as it aims at providing a more systematic and objective basis for the comparison of job contents and an aid in the establishment of a rational pay structure in an industry.

Obviously, the development of new decision making techniques cannot reach a point where basic values are chosen in a mechanical and impersonal manner. Such choices remain a matter of human aspiration and desires. The issues of fairness and equity involve normative values. Job evaluation considers and involves those issues and cannot be regarded as a purely scientific method.

Whatever innovations are made to improve managerial decision making, whatever methodologies are applied in the determination of relative ranks of jobs, the establishment and administration of a salary program, whatever values are held in the consideration of fairness and equity--such methods and values are hardly rational if their applications are not guided by the spirit of what Einstein once said:

Concern for man himself and his fate must always form the chief interest of all technical endeavors, concern for the great

unsolved problems of the organization of labor and the distribution of goods--in order that the creations of our mind shall be a blessing and not a curse to mankind. Never forget this in the midst of your diagrams and equations.<sup>34</sup>

### Summary

The history of TWA dates back to 1925 when its first parent company was organized. Three other parent companies were created subsequently and all merged together in 1930 to form what is today known as TWA. After two decades of domestic service, TWA started international operations in 1946. Today TWA operates 225 jet equipment aircraft and serves 67 major centers in the United States and around the world.

TWA's operations include airline activities, such as the transportation of passengers, mail, express and freight. It operates Hilton International, which provides hotel services in 27 countries, engaging some 22,000 employees. It also provides ground support services for the Apollo Project at Kennedy Space Center in Florida.

TWA organization reflects division of staff and line functions. Its line activities include flight operations, marketing, technical services and operational planning, which are organized under one chief operating officer. Its staff functions include external affairs, industrial relations, finance and training.

TWA has a total of 61,922 employees, out of which 37,377 are engaged exclusively in airline operations. Its personnel are categorized

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34. Otto Nathan and Neinz Norden, eds., Einstein on Peace (New York: Simon & Schuster, 1960), p. 122.

into five classifications. They include: union groups, which consists of crew members, cabin attendants, flight dispatchers, meteorologists, mechanics, food servicemen and guards; non-union/non-management employees, such as reservation agents, ticket agents and secretaries; management employees, such as supervisors, administrators or professionals; seasonal employees, and employees assigned to associated airlines.

Some of the employee benefits (apart from pay) include paid vacations and other off-duty pay, free and reduced rate transportation, stock purchase plan, thrift plan, credit union, group insurance plan and retirement plan.

Financial compensation constitutes perhaps the most important aspect of an employee benefit. It represents his purchasing power which determines and establishes his status in a social community.

From company's point of view, payroll accounts for the substantial part of its overall operational expenditures. The amount of pay level determines the company's type of labor force, its employee attitudes, productivity level and degree of turnover.

A modern industrial enterprise needs a sound wage and salary program if only for administrative purposes. It needs such a program to establish fair and equitable pay structure and to integrate divergent factors into a harmonious whole.

The Industrial Relations Department in TWA is responsible for the development, establishment and administration of wage and salary. It performs these functions through its corporate staff and regional field offices.

TWA salary classification recognizes three broad divisions: contract, non-management and management. The first is negotiated by individual unions and determined accordingly. The last is further subdivided into officers, top management, and middle and lower management classifications. The non-management (non-union) salary structure is a time progression structure and has decreasing differentials of from eight to four per cent between ranges. It is about thirty-four per cent in length with considerable overlap. The management salary structure has a differential of about nine per cent between ranges, about forty per cent in length and a bit of overlap.

The problem of establishing fair and equitable pay relationships and rational salary structure has been widely recognized. Techniques of job evaluation have been developed and used over the years. Job evaluation is described as a process of analysis, assessment and ranking of jobs on the basis of comparative demands they make on incumbents. It evaluates job requirements rather than individual qualities. Job evaluation methods are broadly classified into non-analytical and analytical. The former includes the rank and classification methods, which involve simple operations. The latter includes factor comparison and point rating systems, which are considerably sophisticated, more reliable, and more widely used. The factor-comparison method makes use of key jobs and analysis in terms of factors. The point rating system involves analysis in terms of factors and degrees of each.

TWA's management evaluation plan makes job analysis by consideration of the basic factors which have been established as knowledge,

decision, responsibility and working conditions.

Its "knowledge" factor involves major fields of knowledge, including accounting, aircraft maintenance, economics, engineering, finance, flight operations, industrial relations, law, plant and equipment maintenance, public relations, purchasing, sales and stores.

Its "decision" factor considers complexity of decisions, required abilities, including initiative, foresight, resourcefulness, creativeness and planning; type and scope procedures and policies, extent of guidelines used and amount of supervision received.

Its "responsibility" factor considers responsibility for men, including type and number supervised, for markets and services, records, methods or procedures, policies, assets, including money, materials and equipment, and outside relations.

Its "working conditions" factor considers surroundings, hazards, and traveling.

TWA's non-management evaluation plan considers education, experience, complexity, work of others, contracts, confidential data and records, assets, physical requirements and working conditions as major factors.

Other evaluation plans include those used for foremen, general foremen and sales jobs, which are dependent on statistical analysis, such factors as number of employees supervised by position incumbent, average number of scheduled flights per month, man hours of maintenance, and number of flight departures per month, total revenue, etc., respectively are considered.

TWA job evaluation procedures generally involve the review of received job description for concerned job, the auditing of the job, the determination of jobs for comparison, the rating and classification of the job under study in proper salary grade and advising supervisor of evaluation result. TWA has developed job description forms for use by the various departments for writing job contents of new jobs, added or changed duties for management and non-management jobs.

TWA has established some special salary programs for certain particular groups or jobs. Such programs include senior agent jobs, secretarial service, medical related positions, seasonal full-time employees, first level of supervision and Hawaii salary override.

TWA's overseas compensation is composed of base salary and overseas service allowance. The latter consists of cost of living differential (in the forms of post allowance and quarters allowance) foreign service premium, hardship allowance and the tax equalization adjustment.

Job evaluation has been criticized on several grounds: that it is incapable of adjusting to the dynamic process of economic change, is inconsistent with market demand and supply conditions, its assumptions that "factors" are interdependent are erroneous, its rating is incapable of reflecting accuracy because of human errors such as leniency, harshness, halo effect, or bias; that it is inflexible, costly and time consuming. However, it has also been accepted for various reasons. It is a systematic and possibly objective method that can be used for ranking jobs on comparative basis. It reduces inequities, facilitates fair pay determination processes, simplifies problems of pay demands and provides some other advantages.

TWA's current wage and salary practices compare favorably with some established compensation principles. TWA attempts to maintain the internal relationships between jobs and employee groups through the system of its established evaluation plans and constant study and observation of the pay structures between union and non-union groups and establishing percentage differentials between supervisors and non-management positions, and thus maintain internal consistency.

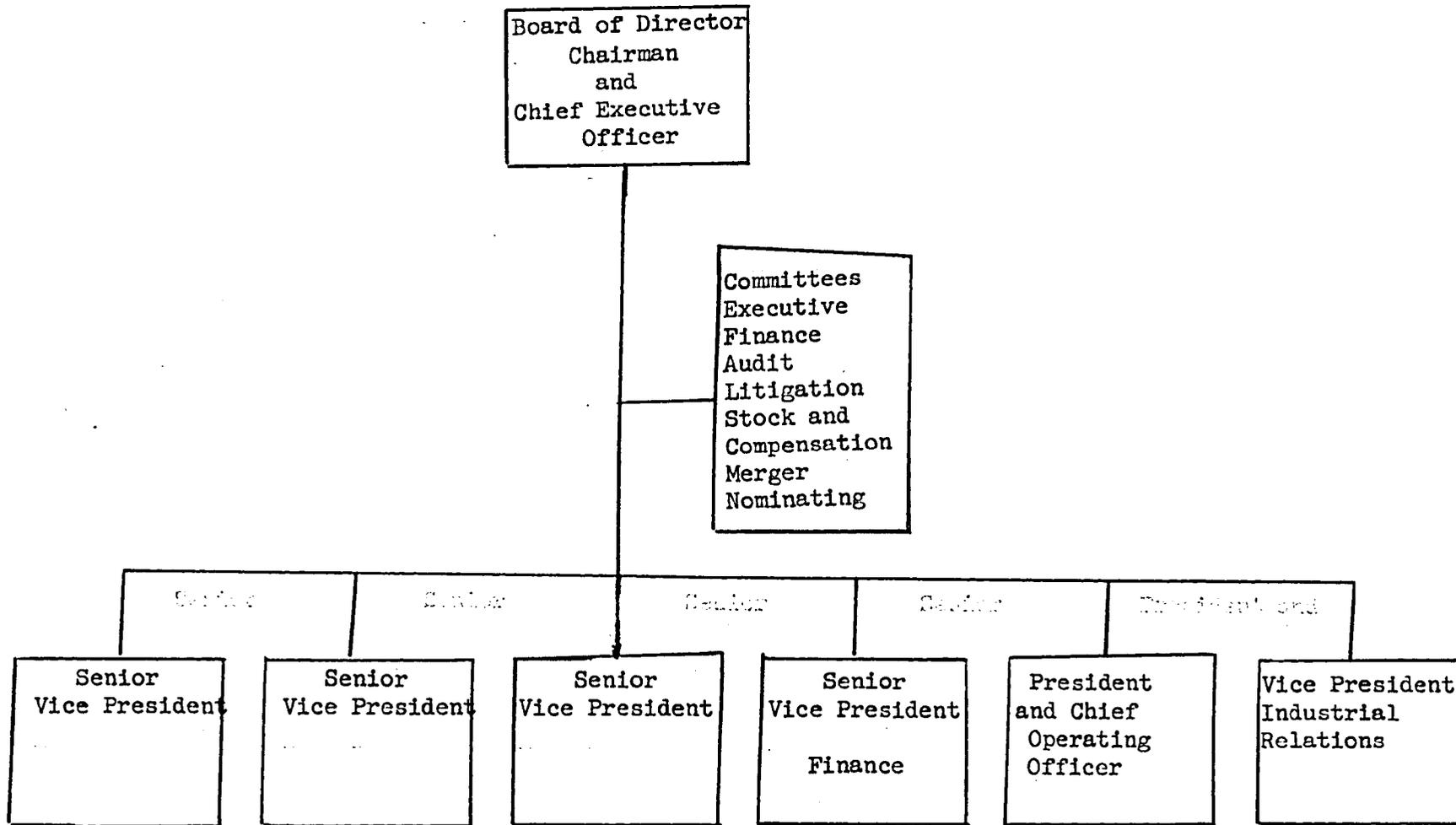
It attempts to maintain external consistency through continuous studies of the labor market. It conducts salary surveys in cooperation with trunk airlines and other companies. Such surveys consider the number of hours worked, paid vacations and other benefits of working conditions. TWA rewards extra competence and outstanding performance through its established system of merit increases for management personnel and service increase for non-management.

TWA has elaborate policies and procedures governing various aspects of salary administration, has a system of communicating salary information to concerned groups of personnel, and maintains records of jobs for reference in making management decisions.

The introduction of an evaluation plan to Ethiopian Airlines may bring such problems as reconciling jobs classified above the maximum of an appropriate salary range, the difficulty or even impossibility of fitting certain jobs into the newly developed salary structure.

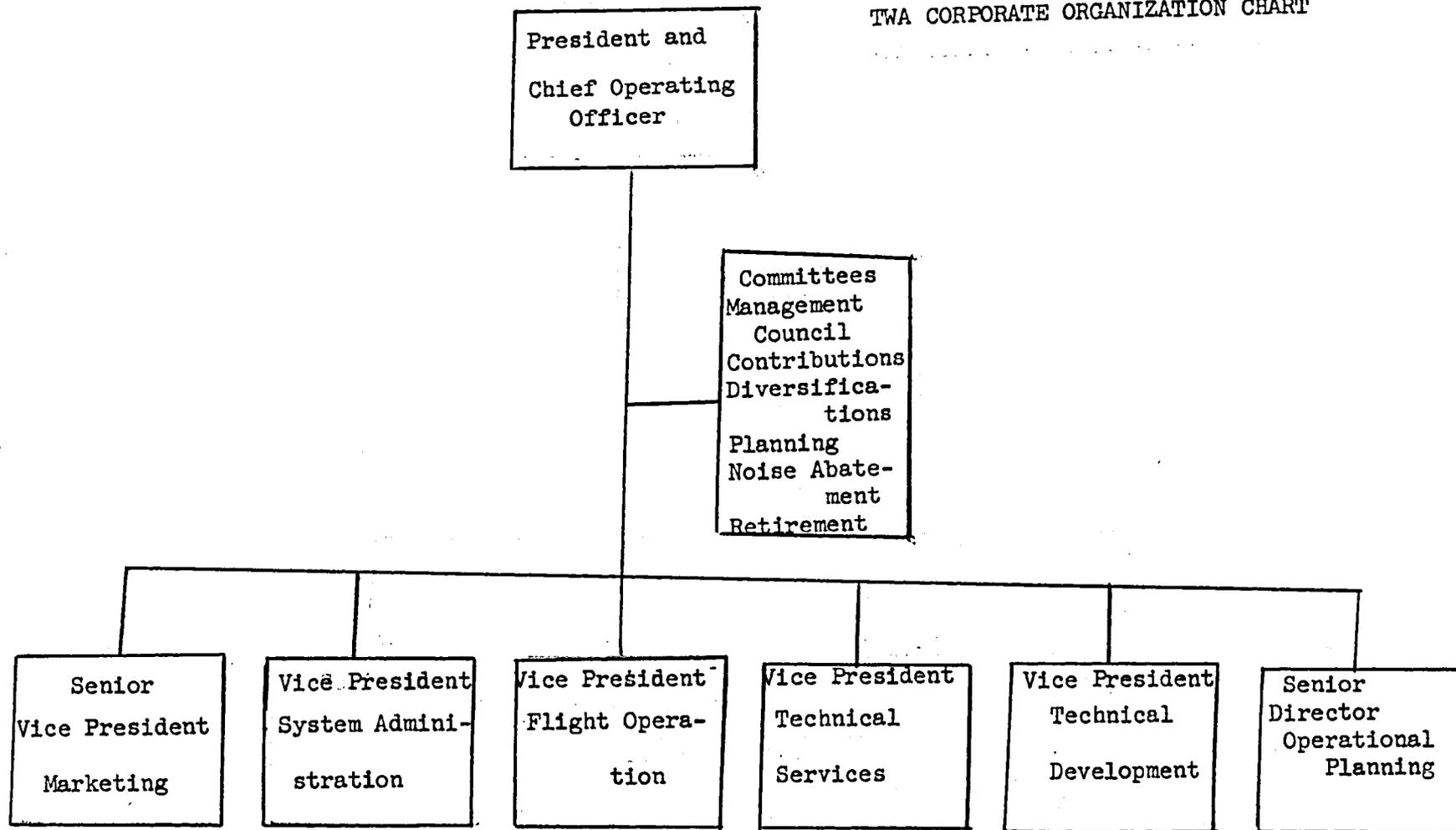
Given the limitations of human decisions that are influenced by normative values, bias, preconceived ideas, there is every reason to believe that analytical job evaluation leads to a more equitable, fairer and rational salary structure.

APPENDIX A-1  
TWA CORPORATE ORGANIZATION CHART



APPENDIX A-2

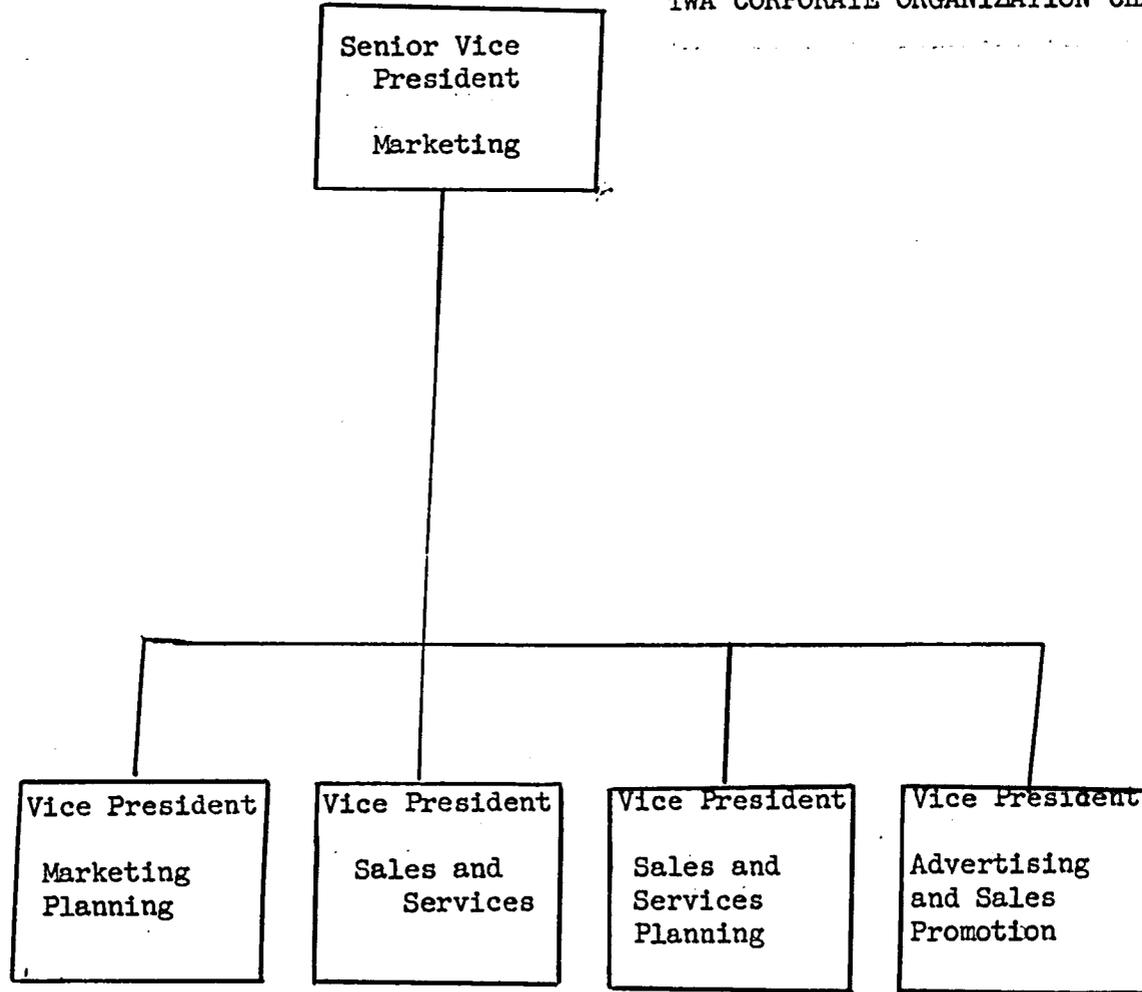
TWA CORPORATE ORGANIZATION CHART



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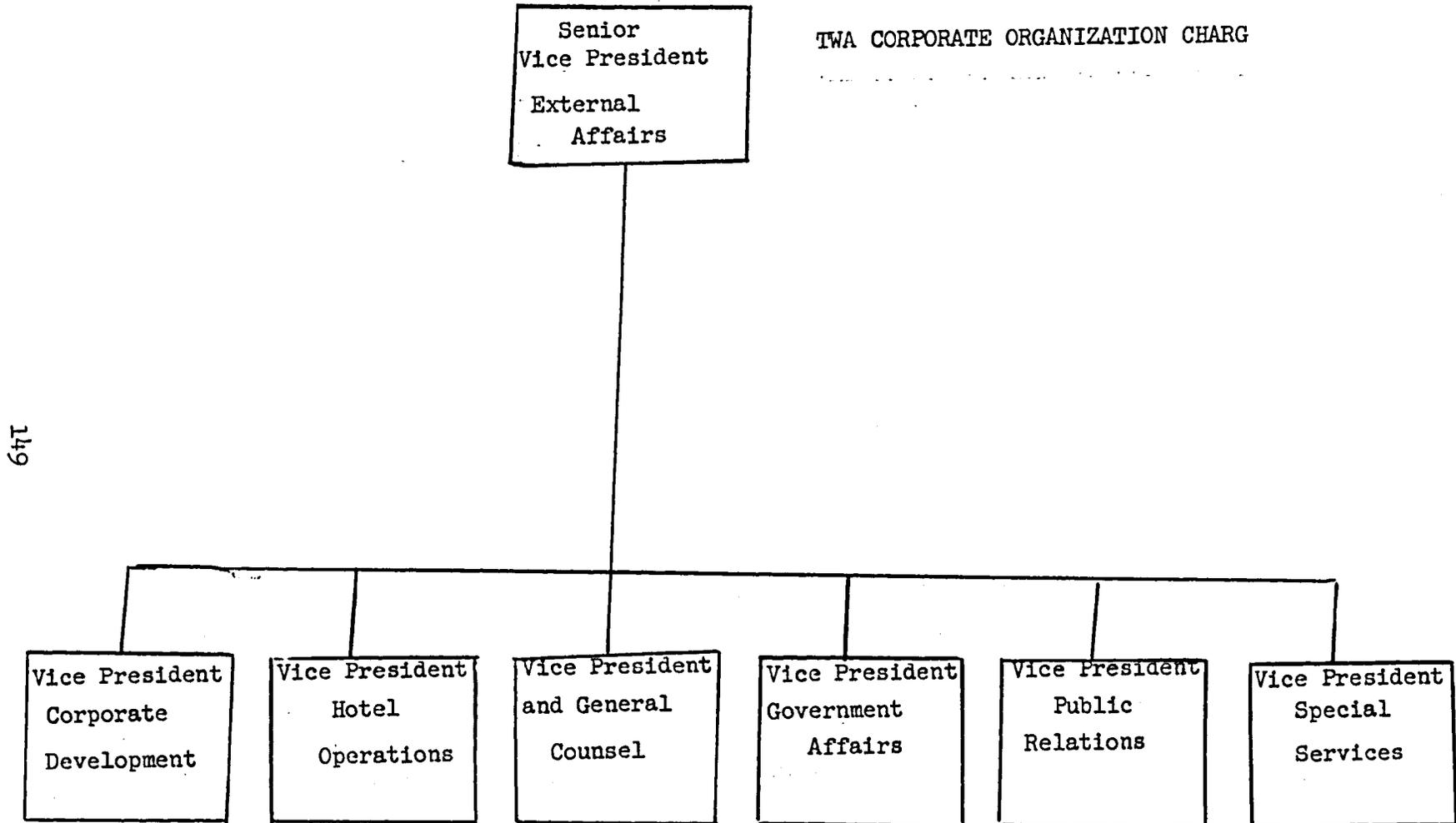
APPENDIX A-3

TWA CORPORATE ORGANIZATION CHART



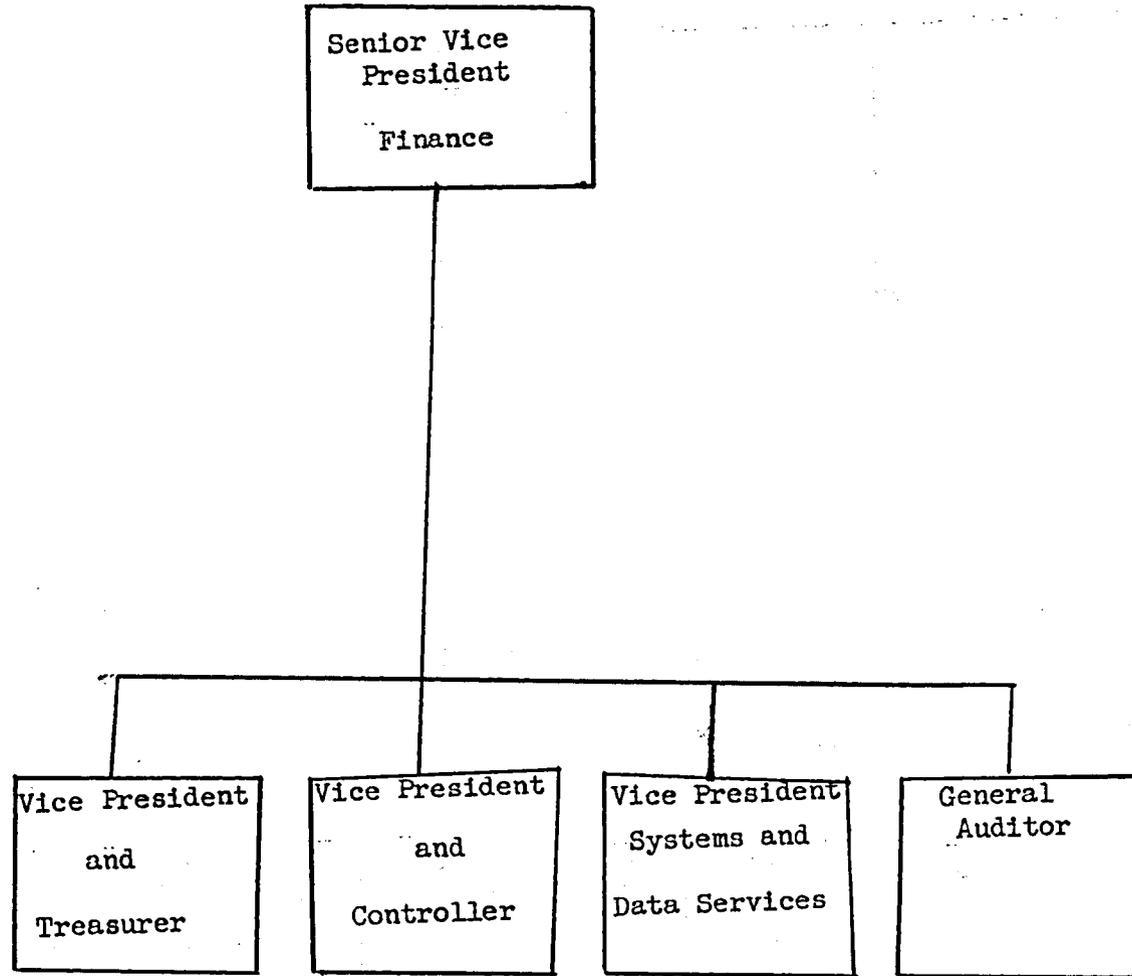
APPENDIX A-4

TWA CORPORATE ORGANIZATION CHART



APPENDIX A-5

TWA CORPORATE ORGANIZATION CHART



APPENDIX B  
 TRANS WORLD AIRLINES  
 CONSOLIDATED OPERATING REVENUE AND EXPENSES

(000 omitted)

<u>Item</u>	<u>1967</u>	<u>1968</u>
<u>Airline Operating Revenues</u>		
Passenger	735,256	788,910
Cargo	88,609	97,963
All Other	<u>51,614</u>	<u>61,371</u>
	875,539	948,244
<u>Airline Operating Expenses</u>		
Wages and Salaries	321,134	359,480
Depreciation and Amortization	89,890	83,259
Other	409,595	475,283
	820,595	918,022
Hotel Revenues	131,763	150,200
Hotel Expenses	126,865	143,998
	4,898	6,202
Net Company Income After Taxes	40,770	21,537

Source: Trans World Airlines, 1968 Annual Report Statistical Supplement, April, 1969, pp. 2-3.

APPENDIX C

SAMPLE

MANAGEMENT JOB RATING SHEET

Job No. \_\_\_\_\_

Date: \_\_\_\_\_

Job Title \_\_\_\_\_

Dept. \_\_\_\_\_

KNOWLEDGE				Total:
Field	Corp.	Extent		Acquaintance
		Thorough	Working	
Accounting				
Aircraft				
Customer Service				
Economics				
Engineering				
Finance				
Flight Operations				
Industrial Relations				
Law				
Plant & Equip. Main.				
Public Relations				
Purchasing				
Sales				
Stores				

DECISIONS		Total:
Complexity of Decisions	_____	_____
Required Abilities:		
Initiative _____	_____	_____
Foresight _____	_____	_____
Resourcefulness _____	_____	_____
Creativeness _____	_____	_____
Planning _____	_____	_____
Procedures:		
Type _____	_____	_____
Scope _____	_____	_____
Policies:		
Type _____	_____	_____
Scope _____	_____	_____

APPENDIX C -- Continued

DECISIONS

Guide Lines -- Extent Used \_\_\_\_\_

Supervision Received: \_\_\_\_\_

Remarks: \_\_\_\_\_

RESPONSIBILITY		Total	
<b>For Men</b>		<b>For Policies</b>	
Number Supervised _____	Type _____	Developing _____	
		Approving _____	
		Interpreting _____	
		Originating _____	
	Number _____	Coordinating _____	
	Type _____	Maintaining _____	T _____
Planning _____		Selecting _____	S _____
Selecting _____		Recommending _____	
Organizing _____			
Coordinating _____		<b>For Assets</b>	
Disciplining _____		<b>Money:</b>	
Training _____		Safekeeping _____	
Paying _____		Expending _____	
Promoting _____		Collecting _____	
Safety _____		Controlling _____	_____
Relations _____			
		<b>Materials:</b>	
		Procuring _____	
		Storing _____	
		Selecting _____	
		Processing _____	
		Transferring _____	
		Inspecting _____	
		Planning _____	
		Using _____	
		Guarding _____	
		Equipment: _____	_____
		Designing _____	
		Planning _____	
		Selecting _____	
		Operating _____	
		Guarding _____	
		Transferring _____	
		Maintaining _____	
<b>For Markets and Services</b>			
Initiating _____			
Selling _____			
Planning _____			
Advertising _____			
Pricing _____			
Negotiating _____			
Servicing _____			
Corresponding _____			

## APPENDIX C--Continued

<b>For Records</b>		Inspecting _____	
Originating _____		Procuring _____	
Interpreting _____		Storing _____	_____
Securing _____			
Designing _____		<b>Outside Relations</b>	
Approving _____		Informing _____	
Analyzing _____	_____	Influencing _____	
<b>For Methods or Procedures</b>		Persuading _____	
Developing _____		Indoctrinating _____	
Originating _____		Interpreting _____	_____
Selecting _____			
Improving _____	T _____	Knowledge _____	
Coordinating _____	S _____	Decisions _____	
Installing _____		Responsibility _____	
Maintaining _____		Working Conditions _____	
<b>Working Conditions</b>			
Surroundings: _____		TOTAL _____	
Traveling: _____			
Hazards: _____			

APPENDIX D

TRANS WORLD AIRLINES, INC.

SAMPLE NON-MANAGEMENT JOB RATING SHEET FORM

Job Classification: \_\_\_\_\_

Summary of Duties: \_\_\_\_\_

Factors	Minimum Requirements	Degree	Points
Education			
Experience			
Complexity			
Work of Others			
Contacts			
Confidential Data and Records			
Assets			
Physical Requirements			
Working Conditions			
		Total	Labor Grade

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