National Survey of Professional, Administrative, Technical, and Clerical Pay, March 1975



Bulletin 1891 U. S. Department of Labor Bureau of Labor Statistics 1975



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Bulletin 1891 U. S. Department of Labor John T. Dunlop, Secretary Bureau of Labor Statistics Julius Shiskin, Commissioner

1975



Preface

This bulletin summarizes the results of the Bureau's annual salary survey of selected professional, administrative, technical, and clerical occupations in private industry. The nationwide salary information, relating to March 1975, is representative of establishments in a broad spectrum of industries throughout the United States, except Alaska and Hawaii.

The results of this survey are used for a number of purposes, including general economic analysis and wage and salary administration by private and public employers. One important use is to provide the basis for setting Federal white-collar salaries under the provisions of the Federal Pay Comparability Act of 1970. Under this act, the Director of the Office of Management and Budget and the Chairman of the U.S. Civil Service Commission, who jointly serve as the President's agent for the purpose of setting pay for Federal white-collar employees, are responsible for translating the survey findings into recommendations to the President as to the appropriate adjustments needed in Federal pay rates to make them comparable with private enterprise pay rates for the same levels of work. The President's agent is also responsible for determining the industrial, geographic, establishment-size, and occupational coverage of the survey. The role of the Bureau of Labor Statistics in the pay-setting process is limited to conducting the survey and advising on the feasibility of proposed survey changes. It should be emphasized that this survey, like any other salary survey, does not provide mechanical answers to pay policy questions.

The occupations studied span a wide range of duties and responsibilities. The occupations selected were those judged to be (a) surveyable in industry within the framework of a broad survey design, (b) representative of occupational groups which are numerically important in industry as well as in the Federal service, and (c) essentially of the same nature in both the Federal and private sectors.

Occupational definitions used in the collection of the salary data (appendix C) reflect duties and responsibilities in private industry; however, they are also designed to be translatable to specific General Schedule grades applying to Federal employees. Thus the definitions of some occupations and work levels were limited to specific elements that could be classified uniformly among establishments. The Bureau of Labor Statistics and the Civil Service Commission collaborated in the preparation of the definitions.

The scope of the survey, in terms of industrial, geographic, and minimum establishment-size coverage, remained the same as in March 1974.

The survey could not have been conducted without the cooperation of the many firms whose salary data provide the basis for the statistical information presented in this bulletin. The Bureau, on its own behalf and on behalf of the other Federal agencies that collaborated in planning the survey, wishes to express appreciation for the cooperation it has received.

This study was conducted in the Bureau's Office of Wages and Industrial Relations by the Division of Occupational Wage Structures. The analysis in this bulletin was prepared by William M. Smith, assisted by Daniel A. Boston. Field work for the survey was directed by the Bureau's Assistant Regional Directors, Division of Operations.

Although only nationwide salary data are presented in this bulletin, clerical and drafting occupation salary data are available for each of the 82 metropolitan areas in which the Bureau conducts area wage surveys. These area reports also include information on such supplementary benefits as paid vacations, holidays, and health, insurance, and pension plans relating to nonsupervisory office workers. A directory of area wage surveys is available at the Bureau's regional offices listed on the inside back cover of this bulletin.

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Professional, Administrative, Technical, and Clerical Pay

Summary

Average salaries of workers in the occupations covered by this survey rose 9.0 percent from March 1974 to March 1975, the largest annual increase recorded since the survey was begun in 1960. Increases for 8 of the 11 professional, administrative, and technical support occupations surveyed ranged from 7.5 to 9.8 percent; the average increase was 8.3 percent. The average of the increases for clerical and clerical supervisory occupations surveyed was 9.6 percent; 5 of the 7 advanced between 8.7 and 10.1 percent.¹

Average monthly salaries for the 72 occupational levels varied from \$460 for clerks engaged in routine filing to \$3,420 for the highest level in the attorney series. For most of the occupations, salary levels in metropolitan areas and in large establishments were higher than the average for all establishments within the full scope of the survey. Salary levels in finance and retail trade industries generally were lower than in other major industry divisions represented in the survey. Reported average standard weekly hours also were generally lower in the finance industries.

Characteristics of the survey

This survey, the 16th in an annual series, provides nationwide salary averages and distributions for 72 work level categories covering 18 occupations. It relates to establishments in all areas of the United States, except Alaska and Hawaii, in the following industries: Manufacturing; transportation, communication, electric, gas, and sanitary services; wholesale trade; retail trade; finance, insurance, and real estate; engineering and architectural services; and research, development, and testing laboratories operated on a commercial basis.² The minimum sizes of establishments surveyed are: 250 employees in manufacturing and retail trade; and 100

¹ Results of the March 1974 survey were presented in National Survey of Professional, Administrative, Technical, and Clerical Pay, March 1974, Bulletin 1837 (Bureau of Labor Statistics, 1974).

employees in all other industry divisions.

Definitions for the occupations included in this study provide for classification of employees according to appropriate work levels. Within each occupation, the work levels surveyed—designated by Roman numerals, with level I as the lowest—are defined in terms of duties and responsibilities. Specific job factors determining classification, however, vary from occupation to occupation.

The number of work level definitions for each occupation ranges from one for messengers to eight each for chemists and engineers. More than one level of work is defined for survey in most of the occupations; some are purposely defined, however, to cover specific bands of work levels, which are not intended to represent all levels or all workers that may be found in those occupations.

The survey is designed to permit separate presentation of data for metropolitan areas. Coverage in metropolitan areas includes the 263 Standard Metropolitan Statistical Areas in the United States, except Alaska and Hawaii, as revised through April 1974 by the U.S. Office of Management and Budget. Establishments in metropolitan areas employed over four-fifths of all the workers and nine-tenths of the professional, administrative, clerical, and related employees within the scope of the survey. Ninety percent of the employees in the occupations chosen for study were employed in metropolitan areas.

The selected occupations included more than 1,233,000 employees, or one-sixth of the estimated employment in professional, administrative, clerical, and related occupations in establishments within the scope of the survey. Employment in the selected occupations varied widely, reflecting actual differences in employment in the various occupations, and also differences arising from variations in the range of duties and responsibilities covered by the occupational definitions. Among the professional and administrative occupations, the eight levels of engineers included a total of 384,862 employees, whereas there were fewer than 5,000 employees in each of four of the occupational categories as defined for the study (chief accountants, job analysts, directors of personnel, and keypunch supervisors). (See

² For a full description of the scope of the 1975 survey, see appendix A.

table 1.) Accounting clerks and keypunch operators made up over one-half of the 497,267 employees in the clerical occupations studied. The selected drafting occupations had aggregate employment of 85,832; the five engineering technician levels together had 87,140.

Although approximately one-half of all the employees in the occupations studied were women, they worked largely in clerical positions. Women filled more than 90 percent of the jobs at each level of file clerks, keypunch operators, stenographers, and typists. A percent distribution of women employees by occupation and level is shown in appendix A.

Changes in salary levels

Text table 1 presents increases in average salaries that occurred between annual surveys since 1961 for each

survey occupation.³ Also shown are average percent changes for the two broad occupational groups covered by the survey (the professional, administrative, and technical support group; and the clerical and clerical supervisory group) and the average percent change for the two groups combined.

The 9.0 percent increase in white-collar salaries in the year ending March 1975 was the largest recorded since the survey was begun. Increases over the year were the largest yet recorded for each of the clerical and clerical supervisory occupations and for 7 of the 11 professional, administrative, and technical support occupations. Clerical and clerical supervisory salaries were up 9.6 percent;

³ Beginning in 1965, data are for establishments in metropolitan areas and nonmetropolitan counties; before 1965, data are for metropolitan areas only. Establishments employing fewer than 250 workers were excluded before 1966.

Text table 1. Percent increases in average salaries, 1961-75, by occupation and group

Occupation and group	1961 to 1962	1962 to 1963	to	to	to	1966 to 1967 ¹	1967 to 1968	1968 to 1969	to	1970 to 1971	1971 to 1972 ¹	1972 to 1973	to	1974 to 1975	Average annual rate of increase 1961 to 1975
All survey occupations ²	2.9	3.0	3.1	3.1	3.3	4.5	5.4	5,7	6.2	6.6	5,8	5.4	6.4	9.0	5.0
Professional, administrative, and technical support ² Accountants Auditors Chief accountants Attorneys Buyers Job analysts Directors of personnel Chemists Engineers Engineering technicians Drafters ⁷	1.4 3.7 3.9 2.6 (⁵)	3.3 3.6 2.8 4.6 (⁵) 2.6 3.0 3.8 4.4 2.9 3.6	3.4 2.8 3.1 4.8 3.3 (⁵) 3.5 4.6 3.3 2.9 3.6 2.6	3.7 3.5 3.9 3.9 4.2 (⁵) 4.3 3.5 3.9 3.2 2.3 (³)	3.6 3.8 3.8 3.3 4.0 (⁵) 5.4 3.6 4.8 3.7 2.8 1.5	4.2 4.6 4.8 5.1 3.2 4.2 3.4 3.8 4.4 4.3 3.7 3.5	5.5 5.7 5.5 5.5 5.3 4.9 7.0 5.4 5.1 5.4 5.1	5.8 7.0 7.2 5.8 (³) 6.6 2.1 5.4 6.5 6.2 5.8	6.2 6.7 7.0 7.1 7.1 6.1 4.1 7.4 5.9 5.5 6.3 4.9	6.7 6.7 7.0 9.1 5.0 7.0 7.7 8.0 5.5 5.7 6.5 5.6	5.5 5.6 5.5 3.9 6.1 6.3 6.8 3.9 5.1 5.2 5.1 7.2	5.4 4.9 5.2 5.8 6.3 5.0 5.2 7.5 3.7 5.1 4.7 6.2	6.3 6.1 5.2 7.2 5.8 6.0 6.1 7.2 7.1 5.4 6.0 6.7	8.3 9.8 6.8 8.6 7.6 9.2 7.5 6.1 10.1 8.4 9.0 8.0	5.1 5.2 5.1 5.4 (⁴) (⁵) 4.8 5.2 5.2 4.8 ⁶ 4.9 (⁴)
Clerical and clerical supervisory ² Accounting clerks File clerks Keypunch operators Keypunch supervisors Messengers Secretaries Stenographers Typists	. (⁵) . (⁵) . (⁵) . 2.6	2.6 2.5 2.6 2.5 (⁵) 2.8 (⁵) 2.5 2.6	2.7 2.8 3.1 2.7 (⁵) 2.3 (⁵) 2.4 2.6	2.4 2.2 2.3 (⁵) 3.0 (⁵) 2.3 2.5	3.0 3.0 2.9 3.7 (⁵) 2.8 (⁵) 2.9 2.6	4.8 3.3 5.1 5.2 (⁵) 5.4 (⁵) 4.6 5.4	5.3 4.7 6.8 4.9 (⁵) 6.2 4.6 4.9 5.8	5.5 4.7 5.5 5.3 (⁵) 6.7 5.3 5.9 5.7	6.2 6.2 5.5 6.4 (*) 6.3 6.4 5.8 6.0	6.5 6.0 6.1 7.0 6.1 6.7 6.6 7.5 6.1	6.1 6.0 5.5 6.8 6.1 6.3 6.1 6.4 5.7	5.4 4.6 5.9 5.4 8.2 5.1 5.1 5.2 4.0	6.4 6.9 5.4 7.3 6.2 5.6 (³) 6.5 6.7	9.6 7.7 9.6 9.9 8.7 10.1 (⁵) 11.6 9.9	4.9 4.5 *5.1 *5.3 (⁵) 5.1 (⁵) *5.2 4.8

¹ Survey data did not represent a 12-month period due to a change in survey timing. Data have been prorated to represent a

NOTE: For method of computation, see appendix A.

¹²⁻month interval.

² Data for 1 administrative occupation (managers of office services, last surveyed in 1968), and 3 clerical occupations (bookkeeping machine operators, last surveyed in 1964, and switchboard operators and tabulating-machine operators, last surveyed in 1970), not shown above, are included in the averages for the periods during which they were surveyed.

³ Comparable data not available for both years.

Comparison over this period was not possible because of changes in the definition of the occupation.

⁵ Not surveyed.

⁶ Average annual rate of increase from 1962 to 1975.

⁷ Includes drafter-tracers.

salaries for the professional, administrative, and technical support occupations were up 8.3 percent. Of the 18 occupations for which 1974-75 increases could be computed, the smallest increases were shown by directors of personnel, at 6.1 percent, and auditors, at 6.8 percent. Showing the largest increases were stenographers, 11.6 percent, and chemists and messengers, 10.1 percent.

To examine the changes in salaries that have occurred since 1961 for different levels of work, all of the occupational classifications were grouped into the three broad categories described in text table 2.

Average salaries increased more for the higher occupational levels (group C) than for the two lower groups from 1961 through 1966, with the exception of the 1962-63 period. Between 1966 and 1969, however, the middle occupational levels (group B) showed larger annual increases than did the lower or higher levels. Between 1969 and 1971, the increases for all three groups were nearly identical, but since 1971 the middle group has trailed the other two. Although the occupational levels in group C show the largest cumulative increase over the entire 1961-75 period, the salaries of the occupational levels in group A have increased the most (29.9 percent) between 1971 and 1975.

Another method of examining salary trends is to combine the data into the four occupational groups shown in chart 1. Increases in the 1974 to 1975 period amounted to 8.7 percent for the experienced professional and administrative group; 8.5 percent for the entry and developmental professional and administrative group; 8.5 percent for the technical support group; and 9.9 percent for the clerical group. These increases are the largest recorded in the 14-year series.

Increases in salaries for the technical support group averaged 4.8 percent over the 14-year period—less than the 4.9 percent shown by both the clerical and entry professional and administrative groups and the 5.2 percent for the experienced professional and administrative group.⁵

Average salaries, March 1975

Average monthly salaries for the occupations included in this report (table 1) ranged from \$460 for file clerks I to \$3,420 for the top level of attorneys surveyed. These extremes reflect the wide range of duties and responsibilities represented by the occupational work levels surveyed. Average salaries for the occupational levels, and a brief indication of the duties and responsibilities they represent, are summarized in the following paragraphs.⁶

Among the five levels of accountants surveyed, average monthly salaries ranged from \$908 for accountants I to \$1,805 for accountants V. Auditors in the four levels defined for survey had average salaries ranging from \$941 a month for auditors I to \$1,567 for auditors IV. Level I in both the accounting and auditing series included trainees who had bachelor's degrees in accounting or the equivalent in education and experience combined. For level III, the most heavily populated group in both series, monthly salaries averaged \$1,205 for accountants and \$1,278 for auditors. Sixty-six

⁴Work levels used for computing 1974-75 increases were: Clerical—All clerical levels.

Technical support-All levels of drafters and engineering technicians.

Entry and developmental professional and administrative—Accountants I and II; auditors I and II; attorneys I; job analysts II; chemists I and II; and engineers I and II.

Experienced professional and administrative—Accountants III, IV, V; auditors III and IV; chief accountants I, II, III, and IV; attorneys II, III, IV, V, and VI; job analysts III and IV; directors of personnel I, II, III, and IV; chemists III, IV, V, VI, VII, and VIII; and engineers III, IV, V, VI, VII, and VIII.

A few survey levels, not readily identifiable with any of the 4 occupational categories, were not used.

⁵ Survey data for 1966-67 and 1971-72 did not represent a 12-month period due to changes in survey timing. Increases for these years have been prorated to represent a 12-month period.

⁶Classification of employees in the occupations and work levels surveyed is based on factors detailed in the definitions in appendix C.

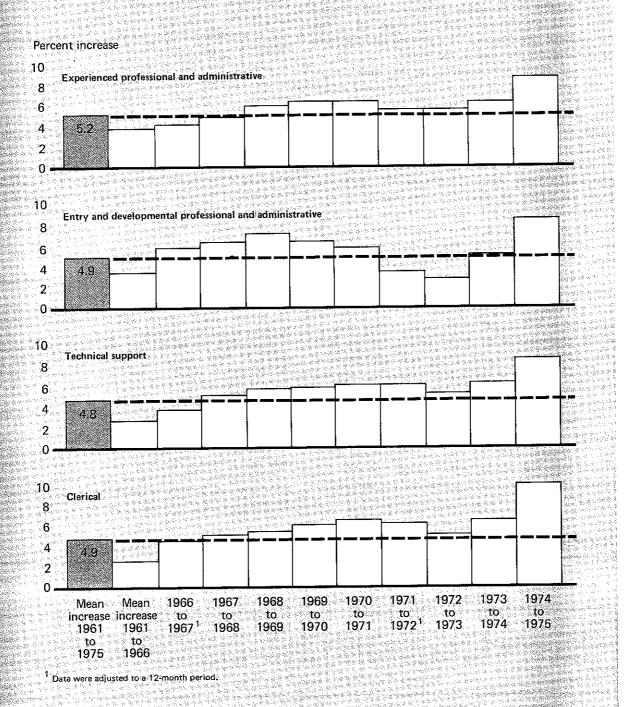
Text table 2. Percent increases in average salaries, 1961-75, by work level category

Work level category	1961 to 1962	1962 to 1963	1963 to 1964	1964 to 1965	1965 to 1966	1966 to 1967 ¹	1967 to 1968	1968 to 1969	1969 to 1970	1970 to 1971	1971 to 19721	1972 to 1973	1973 to 1974	1974 to 1975	1961 to 1975
Group A (GS grades 1-4 in appendix D) Group B (GS grades 5-10	2.8	2.7	2.7	2.2	2.9	4.5	5.1	5.5	6.2	6.2	6.3	5.5	6.2	9.1	93.6
in appendix D) Group C (GS grades 11-15	2.6	4.0	2.6	3.3	3.7	4.8	5.8	6.5	6.3	6.3	5.2	4.4	5.7	8.6	97.3
in appendix D)	3.5	3.7	3.5	4.2	4.2	4.1	4.7	5.9	6.4	6.2	5.6	5.7	6.2	8.8	102.9

¹ Actual survey-to-survey increases have been prorated to a 12-month period.

NOTE: For method of computation, see appendix A.

Chart 1
Increases in Average Salaries for Selected Occupational Groups,
1961 to 1975



percent of the accountants and 37 percent of the auditors were employed in manufacturing industries. Other industry divisions which had large numbers of auditors were finance, insurance, and real estate (31 percent); and public utilities (15 percent).

Chief accountants were surveyed separately from accountants and include those who develop or adapt and direct the accounting program for a company or an establishment (plant) of a company. Classification by level is determined by the extent of delegated authority and responsibility, the technical complexity of the accounting system, and, to a lesser degree, the size of the professional staff directed. Chief accountants at level I, who have authority to adapt the accounting system established at higher levels to meet the needs of an establishment of a company with relatively few and stable functions and work processes (directing one or two accountants), averaged \$1,607 a month. Chief accountants IV,8 who have authority to establish and maintain the accounting program, subject to general policy guidelines, for a company with numerous and varied functions and work processes (directing as many as 40 accountants), averaged \$2,674 a month. Over two-thirds of the chief accountants who met the requirements of the definitions for these four levels were employed in manufacturing industries.

Attorneys are classified into survey levels based upon the difficulty of their assignments and their responsibilities. Attorneys I, which includes new law graduates with bar membership and those performing work that is relatively uncomplicated due to clearly applicable precedents and well-established facts, averaged \$1,268 a month. Attorneys in the top level surveyed, level VI, earned an average of \$3,420 a month. These attorneys deal with legal matters of major importance to their organization, and are usually subordinate only to the general counsel or his immediate deputy in very large firms. Finance, insurance, and real estate industries employed about four-tenths of the attorneys; manufacturing industries employed about three-tenths; and public utilities, about two-tenths.

Buyers averaged \$905 a month at level I, which includes those who purchase "off-the-shelf" and readily available items and services from local sources. Buyers IV, who purchase large amounts of highly complex and technical items, materials, or services, were paid monthly

salaries averaging \$1,582. Manufacturing industries employed 85 percent of the buyers in the four levels.

In the personnel management field, four work levels of job analysts and five levels of directors of personnel were studied.10 Job analysts II, the lowest level for which data could be presented, averaged \$1,045 compared with \$1,538 for job analysts IV, who analyze and evaluate a variety of the more difficult jobs under general supervision, and who may participate in the development and installation of evaluation or compensation systems. Directors of personnel are limited by definition to those who have programs that include, at a minimum, responsibility for administering a job evaluation system, employment and placement functions, and employee relations and services functions. Those with significant responsibility for actual contract negotiation with labor unions as the principal company representative are excluded. Provisions are made in the definition for weighting various combinations of duties and responsibilities to determine the level. Among personnel directors with job functions as specified for the five levels of responsibility, average monthly salaries ranged from \$1,401 for level I to \$3,320 for level V. Manufacturing industries employed 67 percent of the job analysts and 69 percent of the directors of personnel included in the study; the finance, insurance, and real estate industries ranked next, with 21 percent of the job analysts and 13 percent of the directors of personnel.

Chemists and engineers each are surveyed in eight levels. Both series start with a professional trainee level, typically requiring a B.S. degree. The highest level surveyed involves either full responsibility over a very broad and highly complex and diversified engineering or chemical program, with several subordinates each directing large and important segments of the program; or individual research and consultation in difficult problem areas where the chemist or engineer is a recognized authority and where solutions would represent a major scientific or technological advance. 11 Average monthly salaries ranged from \$983 for chemists I to \$3,155 for chemists VIII, and from \$1,076 for engineers I to \$2,843 for engineers VIII. Although at level I the average salaries of engineers exceeded those of chemists by 9 percent, the salary advantage of engineers over chemists decreased steadily with each level, until at level IV the average salaries for both occupations were nearly equal, and at level VIII the average salaries for chemists exceeded those for engineers by 11 percent.

Level IV, the largest group in each series, includes

⁷Establishments primarily engaged in providing accounting and auditing services are excluded from the survey.

⁸ Although chief accountants V, job analysts I, and keypunch supervisors V were surveyed, as defined in appendix C, too few employees in each occupational level met requirements for the level to warrant presentation of salary figures.

⁹ Establishments primarily engaged in offering legal advice or legal services are excluded from the survey.

¹⁰ See footnote 8.

¹¹ It is recognized in the definition that top positions of some companies with unusually extensive and complex engineering or chemical programs are above that level.

professional employees who are fully competent in all technical aspects of their assignments, work with considerable independence, and in some cases, supervise a few professional and technical workers. Manufacturing industries accounted for over nine-tenths of all chemists and nearly three-fourths of all engineers; the surveyed engineering and scientific services, 3 and 15 percent; and public utilities, 1 and 12 percent, respectively.

By definition, the five-level series for engineering technicians is limited to employees providing semiprofessional technical support to engineers engaged in such areas as research, design, development, testing, or manufacturing process improvement, and whose work pertains to electrical, electronic, or mechanical components or equipment. Technicians engaged primarily in production or maintenance work are excluded. Engineering technicians I, who perform simple routine tasks under close supervision, or from detailed procedures, were paid monthly salaries averaging \$719. Engineering technicians V, the highest level surveyed, averaged \$1,236 a month. That level includes fully experienced technicians performing more complex assignments involving responsibility for planning and conducting a complete project of relatively limited scope, or a portion of a larger and more diverse project in accordance with objectives, requirements, and design approaches as outlined by the supervisor or a professional engineer. Averages for intermediate levels III and IV, at which a majority of the technicians surveyed were classified, were \$950 and \$1,092, respectively. As might be expected, most of the technicians as defined were employed in manufacturing (77 percent) and in the scientific services industries studied (16 percent), with public utilities employing nearly all the rest (7 percent). Although the ratio of such technicians to engineers studied was about 1 to 4 in all manufacturing industries, a ratio of approximately 1 to 3 was found in establishments manufacturing mechanical and electrical equipment, 1 to 7 in public utilities, and 1 to 2 in research, development, and testing laboratories.

In the drafting field, the definitions used in the survey cover four levels of work—drafter-tracers, and drafters I, II, and III. Monthly salaries averaged \$640 for drafter-tracers and ranged from \$749 to \$1,191 among the three levels of drafters. Drafter-tracers copy plans and drawings prepared by others or prepare simple or repetitive drawings of easily visualized items. The three drafter levels as defined ranged from employees preparing detail drawings of single units or parts (level I) to those who, working in close support with the design originator, plan the graphic presentation of complex items having distinctive design features, and either prepare or direct the preparation of the drawings (level

III). The drafting employees were distributed by industry in about the same proportion as engineers, with 70 percent in manufacturing, 9 percent in public utilities, and 18 percent in the selected engineering and scientific services industries studied.

Keypunch supervisors¹² are classified on the basis of combinations of three elements—level of supervisory responsibility, difficulty of keypunch work supervised, and number of employees supervised. Keypunch supervisors I, who are responsible for the day-to-day supervision of fewer than 20 operators performing routine keypunching operations, averaged \$766 a month. At level IV, the highest level for which data could be presented, keypunch supervisors averaged \$1,193. Keypunch supervisors and keypunch operators were distributed by industry in approximately similar proportions. Two-thirds were employed in manufacturing and the finance, insurance, and real estate industries, with virtually all of the remainder distributed among the public utilities, wholesale, and retail trade industries.

Among the 12 clerical jobs included in this study, average monthly salaries of \$650 and \$732 were reported for general and senior stenographers; \$595 and \$748 for accounting clerks I and II; and the two levels of typists averaged \$530 and \$621. Generally, average salaries for clerical workers were highest in public utilities and manufacturing industries and lowest in the finance, insurance, and real estate, and retail trade divisions. Employment in manufacturing exceeded that in any of the nonmanufacturing divisions within the scope of the survey in 6 of the 12 clerical work levels; highest employment totals in the other six levels were in the finance, insurance, and real estate division. Women constituted 95 percent or more of the employees in eight of the clerical work levels; men constituted one-half or more in only one (messenger).

Median monthly salaries (the amount below and above which 50 percent of the employees are found) for most of the work levels were slightly lower than the weighted averages (means) cited above (i.e., the salaries in the upper halves of the arrays had a greater effect on the averages than did the salaries in the lower halves). The relative difference between the mean and the median was less than 3 percent for 50 of the 72 work levels, between 3 and 5 percent in 17 work levels, and between 5 and 7 percent in the other five levels.

Salary levels in metropolitan areas

In most of the occupational levels, average salaries for employees in metropolitan areas (table 2) were slightly

¹²See footnote 8.

higher than average salaries for employees in all establishments within the full scope of the survey (table 1). Only in 4 of the 71 work levels for which separate data could be presented were average salaries more than 1.5 percent higher in metropolitan areas than in all areas combined. Employment in the survey occupations in metropolitan areas was about nine-tenths of the total nationwide employment reported in these occupations. The proportions varied, however, among occupations and work levels. Nearly all of the attorneys, for example, but only four-fifths of all buyers and directors of personnel, were employed in metropolitan areas. In 63 of the 71 work levels, 85 percent or more of the employment was in metropolitan areas. It is apparent, therefore, that for most work levels, salaries in nonmetropolitan counties could have little effect upon the averages for all establishments combined.

Salary levels in large establishments

It was possible to present separate data for 66 occupational work levels for establishments with 2,500 employees or more (table 3). Comparisons between employment and relative salary levels in these establishments and the full survey are also presented. Establishments employing 2,500 workers or more employed nearly three-eighths of the professional, administrative, supervisory, and clerical workers within the scope of the survey, and almost two-fifths of the workers in the selected occupations studied. In the 66 occupational work levels shown in table 3, large establishments accounted for varying proportions of employment, ranging from 6 to 75 percent (directors of personnel II and engineering technicians V, respectively). The range was from 18 to 47 percent for clerical and clerical supervisory jobs, and from 6 to 75 percent for nonclerical jobs.

The salary levels in large establishments, expressed as a percent of levels in all establishments combined, ranged from 100 to 120. Salary averages in large establishments exceeded the all-establishment averages by 5 percent or more in all but one clerical and clerical supervisory occupational level, but in only 29 of 51 nonclerical levels, as shown by the following tabulation (all-establishment average for each occupational level = 100 percent):

•	Professional, administrative, and technical	Clerical, clerical supervisory
Total number of levels .	51	15
100-104 percent	22	1
105-109 percent	20	. 4
110 percent and over	9	10

Relative salary levels in large establishments tended to be highest for work levels in which large establishments accounted for small proportions of the total employment.

Salary distributions

Percent distributions of employees by monthly salary are presented for the professional and administrative occupations in table 4, for technical support occupations and keypunch supervisors in table 5, and for employees in clerical occupations in table 6. Within all of the 72 occupational work levels, salary rates for the highest paid employees were more than twice those of the lowest paid employees. The absolute spread between highest and lowest paid workers within a given work level tended to widen with each rise in work level for most occupations. All occupations showed a substantial degree of overlapping of individual salaries between work levels. Ranges in salary rates of employees in established pay grades or work levels within salary structures of individual firms also often overlapped substantially.

The middle 50 and 80 percent of the salary range, and the median salary for each occupation work level, have been charted (charts 2 and 3). The charts point up occupational pay relationships as well as the typically greater degree of salary dispersion associated with the higher work levels in each occupational series.

Expressing the salary range of the middle 50 percent of employees in each work level as a percent of the median salary permits comparison of salary ranges and eliminates extremely low and high salaries from each comparison. As shown in text table 3, the degree of dispersion ranged from 15 to 30 percent of the median salary in 68 of the 72 work levels. The degree of dispersion tended to be greater in the clerical and keypunch supervisory occupations than in the other occupations studied.

Differences in the range of salaries paid individuals within work levels surveyed reflect a variety of factors other than differences in the range of duties and responsibilities encompassed by the various work level definitions. Two of these factors are: Salary structures within establishments which provide for a range of rates for each grade level; and regional variations, particularly in the clerical levels (clerical employees are usually recruited locally, while the job field tends to be broader regionally, often national in scope, for the professional and administrative occupations). A third factor is

¹³ For analysis of interarea pay differentials in clerical salaries, see Area Wage Surveys: Metropolitan Areas, United States and Regional Summaries, 1972-73, Bulletin 1775-98 (Bureau of Labor Statistics, 1975).

Chart 2

Salaries in Professional and Technical Occupations, March 1975

Median Monthly Salaries and Ranges Within Which Fell 50 Percent and 80 Percent of Employees

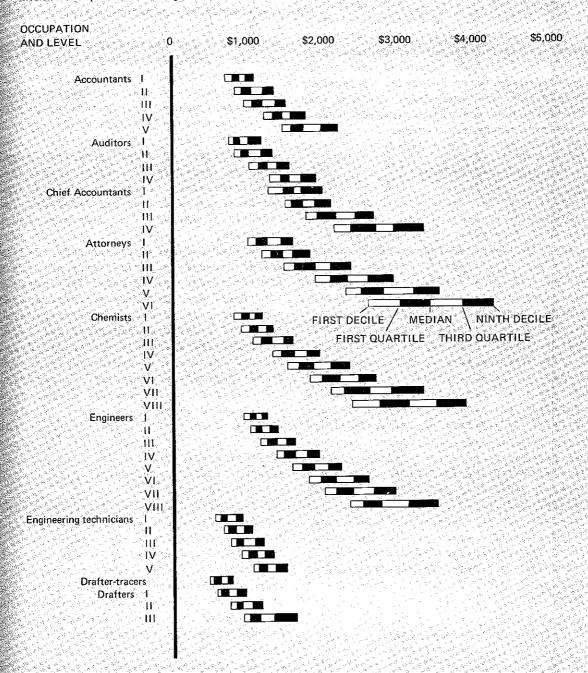
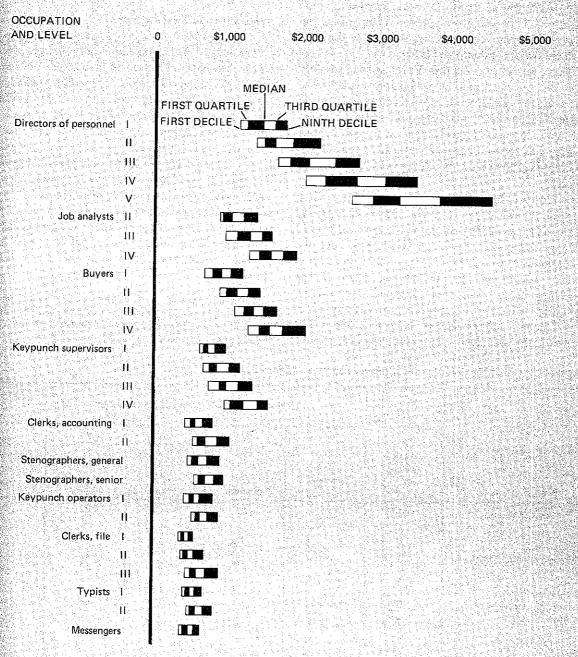


Chart 3

Salaries in Administrative and Clerical Occupations, March 1975

Median Monthly Salaries and Ranges Within Which Fell 50 Percent and 80 Percent of Employees



industry variation. Table 7 and chart 4 show how employment in surveyed occupations varies by industry.

Pay differences by industry

The survey is planned to permit publication of national survey estimates by level of work. By combining the data for all levels of work studied in each occupation, it is possible to present comparisons between relative salary levels in major industry divisions and all industries combined (table 8).

Relative salary levels for the 11 professional, administrative, and technical support occupations tended to be closest to the average for all industry divisions in manufacturing, which contributed more to total employment than any other industry division for all but one (attorneys) of the 11 occupations. Relative salary levels in the public utilities industry division were generally the highest.

For most of the occupations studied, relative salary levels were lower in retail trade and in finance, insurance, and real estate than in other industry divisions. In those occupations in which retail trade and the finance industries contributed a substantial proportion of the total employment, the average salary in the occupations for all industries combined was lowered, and the relative levels in industries such as manufacturing and public utilities tended to be well above 100 percent of the all-industry level. For example, relative

pay levels for file clerks (108 percent of the all-industry level in manufacturing and 137 percent in public utilities) reflected the influence of lower salaries for the high proportion (61 percent) of all-industry employment included in the finance industries. The finance industries, however, also reported lower average standard weekly hours than the other industries surveyed, as shown in table 9.

Average standard weekly hours

The length of the standard workweek, on which the regular straight-time salary is based, was obtained for individual employees in the occupations studied. When individual weekly hours were not available, particularly for some higher level professional and administrative positions, the predominant workweek of the office work force was used as the standard workweek. The distribution of average weekly hours (rounded to the nearest half-hour) is presented in table 9 for all work levels of each occupation combined in major industry divisions surveyed. Average weekly hours were lower in finance, insurance, and real estate (38 hours in most occupations) than in the other industry divisions (39 or 39.5 hours). Average weekly hours have been stable over the past decade. 14

¹⁴For information on scheduled weekly hours of office workers employed in metropolitan areas, see *Area Wage Surveys*. *Selected Metropolitan Areas*, 1973-74, Bulletin 1795-28 (Buream of Labor Statistics, 1975).

Text table 3. Distribution of work levels by degree of salary dispersion

		Number of levels having degree of dispersion of—									
Occupation	Number of work levels	Under 15 percent	15 and under 20 percent	20 and under 25 percent	25 and under 30 percent	30 percent and over					
All occupations	72	1	15	31	22	3					
Accountants	5		2	2	1						
Auditors	4	1	2	2							
Chief accountants	4		2	2		<i></i>					
Attorneys	6			5 .	1						
uyers	4			3	1						
ob analysts	3			1 1	2						
Directors of personnel	5			1 1	4						
hemists	5 8		2	6							
ngineers	8	1 1	4	3							
ngineering technicians	5		2	2	1						
rafters ²	4			2	2						
eypunch supervisors	4		1		3						
lerical workers	12			2	7	3					

Degree of dispersion equals the salary range of the middle percent of employees in a work level expressed as a percent

of the median salary for that level.

2 Includes drafter-tracers.

Chart 4

Relative Employment in Selected Occupational Groups
by Industry Division, March 1975

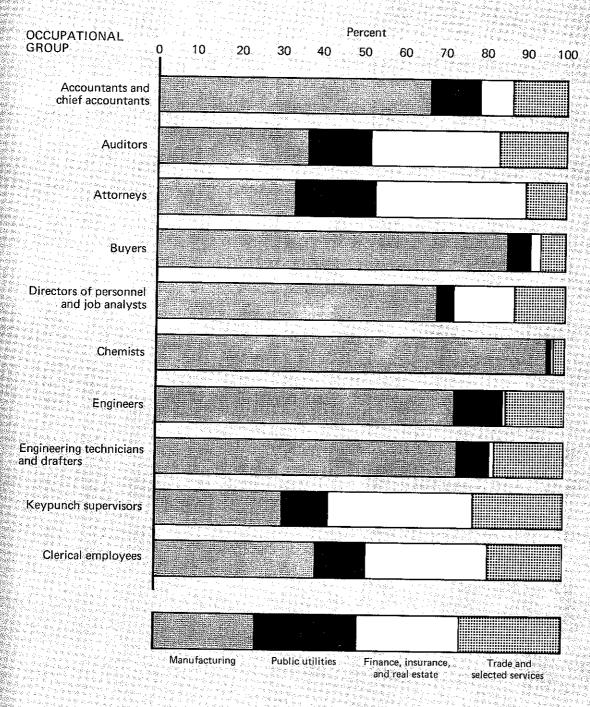


Table 1. Average salaries: United States

(Employment and average salaries for selected professional, administrative, technical, and clerical occupations in private industry, ¹ United States except Alaska and Hawaii, March 1975)

			Monthly	salaries 4			Annual sa	laries 4	
	Number of			Middle	range ⁵			Middle	range 5
Occupation and level ²	employees ³	Mean	Median	First quartile	Third quartile	Mean	Median	First quartile	Third quartile
Accountants and auditors			,	·					
Accountants I Accountants II Accountants III Accountants IV Accountants IV	6,507 12,806 29,738 19,228 6,765	\$ 908 1,065 1,205 1,468 1,805	\$ 900 1,039 1,177 1,438 1,758	\$812 930 1,058 1,320 1,599	\$988 1,195 1,325 1,597 1,980	\$10,891 12,785 14,458 17,618 21,664	\$10,800 12,468 14,124 17,256 21,096	\$ 9, 744 11, 160 12, 696 15, 840 19, 188	\$11,856 14,340 15,900 19,164 23,760
Auditors I ———————————————————————————————————	1,286 2,732 5,036 3,130	941 1,049 1,278 1,567	900 1,014 1,250 1,530	833 916 1,125 1,405	1,009 1,166 1,402 1,691	11,296 12,587 15,334 18,800	10,800 12,168 15,000 18,360	9,996 10,992 13,500 16,860	12,108 13,992 16,824 20,292
Chief accountants II Chief accountants III Chief accountants III	456 1,159 798 317	1,607 1,777 2,186 2,674	1,590 1,738 2,147 2,697	1,450 1,597 1,916 2,337	1,712 1,883 2,416 2,920	19,289 21,323 26,226 32,094	19,080 20,856 25,764 32,364	17,400 19,164 22,992 28,044	20,544 22,596 28,992 35,040
Attorneys I Attorneys II Attorneys II Attorneys III Attorneys IV Attorneys V Attorneys VI	571 1,341 1,953 1,991 1,021 627	1,268 1,480 1,880 2,347 2,837 3,420	1,250 1,449 1,868 2,303 2,778 3,391	1,100 1,300 1,625 2,075 2,477 2,999	1,416 1,603 2,076 2,582 3,165 3,812	15,220 17,757 22,558 28,159 34,040 41,046	15,000 17,388 22,416 27,636 33,336 40,692	13,200 15,600 19,500 24,900 39,724 35,988	16, 992 19, 236 24, 912 30, 984 37, 980 45, 744
Buyers						i			
Buyers I Buyers II Buyers III Buyers IV	4,100 12,063 13,232 5,047	905 1,111 1,333 1,582	883 1,086 1,312 1,535	779 965 1,173 1,392	1,012 1,235 1,460 1,711	10,861 13,337 15,995 18,983	10,596 13,032 15,744 18,420	9,348 11,580 14,076 16,704	12,144 14,820 17,520 20,532
Personnel management Job analysts II Job analysts IV Job analysts IV	279 644 492	1,045 1,246 1,538	1,014 1,238 1,537	888 1,086 1,374	1,161 1,399 1,696	12,543 14,949 18,459	12,168 14,856 18,444	10,656 13,032 16,488	13, 932 16, 788 20, 352
Directors of personnel I	1,008 1,896	1,401 1,661 2,086 2,653 3,320	1,416 1,583 2,014 2,666 3,187	1,191 1,442 1,775 2,226 2,846	1,574 1,816 2,332 3,019 3,744	16,809 19,938 25,033 31,841 39,843	16,992 18,996 24,168 31,992 38,244	14,292 17,304 21,300 26,712 34,152	18,888 21,792 27,984 36,228 44,928
Chemists II Chemists II Chemists II Chemists IV Chemists VI Chemists VI Chemists VI Chemists VII Chemists VII	1,574 3,215 8,090 10,134 7,238 3,977 1,566	983 1,107 1,298 1,600 1,892 2,227 2,614 3,155	1,000 1,100 1,290 1,580 1,850 2,200 2,576 3,113	916 1,000 1,150 1,435 1,669 1,970 2,259 2,720	1,067 1,208 1,429 1,759 2,079 2,441 2,863 3,482	11,801 13,288 15,572 19,204 22,700 26,729 31,362 37,855	15, 480 18, 960 22, 200 26, 400 30, 912 37, 356	12,000 13,800 17,220 20,028 23,640 27,108 32,640	12,804 14,496 17,148 21,108 24,948 29,292 34,356 41,784
Engineers I Engineers II Engineers III Engineers IV Engineers IV Engineers VI Engineers VI Engineers VII Engineers VIII	14,592 29,084 84,519 114,108 80,836 41,314 16,239 4,170	1,076 1,183 1,361 1,620 1,869 2,176 2,425 2,843	1,062 1,166 1,347 1,600 1,850 2,149 2,370 2,759	999 1,086 1,230 1,464 1,691 1,945 2,129 2,499	1,150 1,267 1,484 1,768 2,032 2,374 2,666 3,100	12,917 14,197 16,330 19,443 22,427 26,109 29,101 34,114	19,200 22,200 25,788 28,440	11,988 13,032 14,760 17,568 20,292 23,340 25,548 29,988	13,800 15,204 17,808 21,216 24,384 28,488 31,992 37,200
Technical support Engineering technicians I Engineering technicians III Engineering technicians IIIV Engineering technicians IV		719 831 950 1,092 1,236	706 810 930 1,085 1,220	623 725 837 984 1,112	809 917 1,051 1,182 1,339	8,625 9,970 11,397 13,101 14,829	9,720 11,160 13,020	7,476 8,700 10,044 11,808 13,344	9,708 11,004 12,612 14,184 16,068

Table 1. Average salaries: United States-Continued

(Employment and average salaries for selected professional, administrative, technical, and clerical occupations in private industry, ¹ United States except Alaska and Hawaii, March 1975)

· · · · · · · · · · · · · · · · · · ·	Number		Monthly	salaries 4			Annual s	alaries 4	
Occupation and level ²	of		Median	Middle	range 5	16		Middle	range 5
	employees 3	Mean Mean		First quartile	Third quartile	Mean	Median	First quartile	Third quartile
Technical support—Continued					:				
Drafter-tracers Drafters I	5,470 20,313 29,764 30,285	\$640 749 935 1,191	\$630 725 912 1,131	\$ 542 650 815 995	\$720 830 1,028 1,309	\$7,674 8,988 11,217 14,289	\$7,560 8,698 10,949 13,569	\$'6,507 7,799 9,778 11,940	\$8,63- 9,958 12,332 15,70
Clerical supervisory									
Keypunch supervisors I Keypunch supervisors II Keypunch supervisors III Keypunch supervisors IV	1,199 1,747 1,207 288	766 883 998 1,193	739 847 975 1,169	675 750 869 1,009	804 999 1,115 1,351	9,187 10,595 11,971 14,310	8,868 10,164 11,700 14,028	8,100 9,000 10,428 12,108	9,64 11,98 13,38 16,21
Clerical									·
Clerks, accounting I Clerks, accounting II Clerks, file I Clerks, file II Clerks, file II Clerks, file III Keypunch operators I Keypunch operators II Messengers Stenographers, general Stenographers, senior Typists I Typists II	83,611 69,858 24,669 19,637 7,151 58,011 44,240 22,803 37,949 41,137 52,671 35,530	595 748 460 520 640 593 683 518 650 732 530 621	565 717 441 489 607 563 657 496 623 711 600	499 617 400 435 521 495 587 435 542 620 455 526	668 845 495 566 731 655 755 741 826 673	7,141 8,982 5,524 6,244 7,683 7,114 8,193 6,214 7,801 8,784 6,365 7,452	6,778 8,603 5,292 5,866 7,288 6,752 7,883 5,947 7,474 8,532 6,117 7,202	5,987 7,404 4,799 5,214 6,257 5,944 7,039 5,214 6,507 7,438 5,456 6,307	8,017 10,138 5,944 6,796 8,777 7,859 9,058 6,872 8,896 9,907 6,950

ing to the employee's normal work schedule excluding overtime hours. Nonproduction bonuses are excluded, but cost-of-living payments and incentive earnings are included.

5 The middle range (interquartile) used here is the central part of the array excluding the upper and lower fourths of the employee distribution.

¹ For scope of study, see table in appendix A.
2 Occupational definitions appear in appendix C.
3 Occupational employment estimates relate to the total in all establishments within scope of the survey and not to the number actually surveyed. For further explanation, see appendix A, p.
4 Salaries reported relate to the standard salaries that were paid for standard work schedules; i.e., the straight-time salary correspond-

Table 2. Average salaries: Metropolitan areas

(Employment and average salaries for selected professional, administrative, technical, and clerical occupations in private industry, metropolitan areas, ¹ March 1975)

	T		Monthly	salaries ⁴			Annual sa	alaries 4	
Occupation and level ²	Number of		[Middle	range 5		·	Middle	range ⁵
•	employees 3	Mean	Median	First quartile	Third quartile	Mean	Median	First quartile	Third quartile
Accountants and auditors									
Accountants I	5,582	\$906	\$900	\$804	\$990	\$10,867	\$10,800	\$9.648	\$11,880
	11,688	1,073	1,045	935	1,210	12,874	12,540	11,220	14,520
Accountants III Accountants IV	25,704	1,216	1,188	1,065	1,340	14,588	14,256	12,780	16,080
Accountants IV	16,724 6,130	1,472 1,812	1,442 1,775	1,324 1,600	1,599	17,666 21,745	17,304 21,300	15,888 19,200	19,188 23,940
Auditors I ———————————————————————————————————	1,249	941	900	833	1,008	11,296	10,800	9,996	12,096
Auditors II	2,490	1,055	1,025	916	1,175	12,660	12,300	10,992	14,100
Auditors II ——————————————————————————————————	4,789	1,278	1,255	1,120	1,402	15,335	15,060	13,440	16,824
	2,976	1,571	1,536	1,408	1,696	18,847	18,432	16,896	20,352
Chief accountants I	388 974	1,637 1,774	1,624 1,738	1,458 1,597	1,841 1,874	19,639 21,291	19,488 20,856	17,496 19,164	22,092 22,488
Chief accountants III	691	2,184	2,145	1,900	2,382	26,207	25,740	22,800	28,584
Chief accountants III Chief accountants III Chief accountants IV	310	2,675	2,705	2,337	2,948	32,102	32,460	28,044	35,376
Attorneys									
Attorneys II — — — — — — — — — — — — — — — — — —	553 1,284	1,273	1,250 1,442	1,110 1,300	1,416	15,274 17,737	15,000 17,304	13,320 15,600	16,992 19,080
Attorneys II	1,284	1,478 1,881	1,442	1,625	2,078	22,573	22,416	19,500	24,936
Attorneys IV	1,912	2,350	2,300	2,075	2,599	28,195	27,600	24,900	31,188
Attorneys V	1,015	2,837	2,778	2,479	3,166	34,047	33,336	29,748	37,992
Attorneys VI	627	3,420	3,391	2,999	3,812	41,046	40,692	35,988	45,744
Buyers	. 1								
Buyers I Buyers II Buyers II Buyers II Buyers II	3,244	920	900	791	1,025	11,037	10,800	9, 492	12,300
Buyers H	9,338	1,127	1.100	975	1,250	13,519	13,200	11,700	15,000
Buyers IV	11,396 4,881	1,342 1,583	1,325 1,538	1,182	1,466	16,105 19,001	15,900 18,456	14,184 16,680	17,592 20,640
Personnel management	7,501	1,505	1,330	1,5,0	1,720	17,001	10,450	10,000	20,040
	262	1,033	1,010	886	1,152	12,400	12,120	10,632	13,824
Job analysts II	605	1,033	1,250	1,090	1,391	14,954	15,000	13,080	16,692
Job analysts II — — — — — — — — — — — — — — — — — —	481	1,542	1,540	1,375	1,700	18,507	18,480	16,500	20,400
Directors of personnel I Directors of personnel II Directors of personnel III Directors of personnel III Directors of personnel IV	718	1,400	1,416	1,200	1,542	16,805	16,992	14,400	18,504
Directors of personnel II	1,511	1,674	1,599	1,450	1,804	20,085	19,188	17,400	21,648
Directors of personnel IV	934 247	2,097 2,677	2,043 2,670	1,756 2,249	2,332 3,040	25,161 32,128	24,516 32,040	21,072 26,988	27, 984 36, 480
Chemists and engineers		2,0	2,0.0	.,,	.,	32,120		, /65	
	1 207	994	1,010	920	1,080	11,931	12,120	11,040	12,960
Chemists II —————————————————————————————————	1,387 2,904	1, 115	1,105	1,005	1,215	13,379	13,260	12,060	14,580
Chemists III	6,681	1,321	1,315	1,183	1,450	15,850	15,780	14, 196	17,400
	8,800 6,254	1,612 1,903	1,593 1,866	1,450 1,675	1,775 2,086	19,347 22,835	19,116 22,392	17,400 20,100	21,300 25,032
Character III	3 560	2,246	2,216	1,985	2,455	26,950	26,592	23,820	29,460
Chemists VII	1,452	2,626	2,610	2,274	2,875	31,507	31,320	27,288	34,500
Chemists VII ——————————————————————————————————	393	3,167	3,113	2,674	3, 499	38,001	37,356	32,088	41,988
Engineers I — Engineers II — Engineers III — Engineers IV — Engineers V — Engineers V — Engineers V I — Engineers V III — Engineers V III — Engineers Engineers Engineers Engineers Engineers Engineers Engineers Engineers E	13,323 25,862	1,079 1,190	I,065 1,170	1,000 1,090	1,150	12,952 14,278	12,780 14,040	12,000 13,080	13,800 15,300
Engineers II	76,601	1,190	1,170	1,090	1,275	16,443	16,272	13,080	17,940
Engineers IV	103,134	1,630	1,610	1,474	1,780	19,558	19,320	17,688	21,360
Engineers V	75,216	1.876	1,855	1,700	2,040	22,512	22,260	20, 400	24,480
Engineers VI	38,636	2,184	2,155	1,950	2,380	26,211	25,860	23,400	28,560
Engineers VIII	15,557 3,955	2,430 2,848	2,374 2,765	2,132 2,500	2,670 3,100	29,158 34,172	28,488 33,180	25,584 30,000	32,040 37,200
Technical support							• -		
Engineering technicians I Engineering technicians II Engineering technicians III Engineering technicians IV Engineering technicians V	3,235	724	707	627	810	8,692	8,484	7,524	9,720
Engineering technicians II	10,678	828	804	722	912	9,940	9,648	8,664	10,944
Engineering technicians III	20,158	952 1,100	933 1,091	835 995	1,053 1,195	11,428 13,199	11,196 13,092	10,020 11,940	12,636 14,340
Engineering technicians iv	18, 474	1,100	1,220	1,111	1,340	14,843	14,640	13,332	16,080
Engineering technicians V	10,4(4)					1710721	171070	133336	10,000

Table 2. Average salaries: Metropolitan areas-Continued

(Employment and average salaries for selected professional, administrative, technical, and clerical occupations in private industry, metropolitan areas, 1 March 1975)

			Monthly	salaries 4			Annual sa	alaries ⁴	
Occupation and level ²	Number of			Middle	range 5	,,,,,,	Median -	Middle	range 5
	employees 3	Mean	Median	First quartile	Third quartile	Mean	Median	First quartile	Third quartile
Technical support—Continued									
Drafter-tracers Drafters II Drafters II	4,972 16,895 24,785 27,462	\$645 759 944 1,207	\$634 730 912 1,145	\$543 652 821 1,004	\$732 843 1,040 1,330	\$7,737 9,103 11,325 14,485	\$7,612 8,760 10,949 13,737	\$6,515 7,821 9,854 12,044	\$8.786 10,115 12,485 15,956
Clerical supervisory Keypunch supervisors I ———————————————————————————————————	1,067 1,681 1,167 282	765 882 1,002 1,198	739 847 983 1,175	675 750 872 1,031	805 988 1,122 1,356	9,178 10,587 12,026 14,377	8,868 10,164 11,796 14,100	8,100 9,000 10,464 12,372	9,660 11,856 13,464 16,272
Clerks, accounting I Clerks, file I Clerks, file I Clerks, file II Clerks, file II Keypunch operators I Keypunch operators II Mcssengers Stenographers, general Stenographers, senior Typists I Typists I	18,565 6,734 50,059 40,718 21,451 33,518 37,344	601 754 460 521 638 603 687 518 657 738 657	571 723 439 489 603 570 660 495 630 720 515	500 621 400 435 521 500 590 435 547 625 456 525	678 854 497 566 726 674 761 570 750 833 584 695	7,216 9,050 5,524 6,252 7,658 7,239 8,249 6,210 7,886 8,861 6,413 7,465	6, 855 8, 681 5, 266 5, 866 7, 237 6, 839 7, 925 5, 944 7, 558 8, 638 6, 178 7, 198	5,996 7,456 4,799 5,214 6,257 5,999 7,079 5,214 6,570 7,498 5,475 6,299	8,134 10,249 5,965 6,796 8,707 8,086 9,135 6,839 8,998 10,001 7,013 8,342

ing to the employee's normal work schedule excluding overtime hours. Nonproduction bonuses are excluded, but cost-of-living payments and incentive earnings are included.

5 The middle range (interquartile) used here is the central part of the array excluding the upper and lower fourths of the employee distributions.

¹ For scope of study, see table in appendix A.

² Occupational definitions appear in appendix C.

³ Occupational employment estimates relate to the total in all establishments within scope of the survey and not to the number actually surveyed. For further explanation, see appendix A, p. 29.

⁴ Salaries reported relate to the standard salaries that were paid for standard work schedules, i.e., the straight-time salary correspond-

bution.

Table 3. Average salaries: Establishments employing 2,500 workers or more

(Employment and average monthly salaries for selected professional, administrative, technical, and clerical occupations in private industry in establishments employing 2,500 workers or more, 2 United States except Alaska and Hawaii, March 1975)

			Monthly	salaries ⁵		Levels in establishments employing 2, 500 workers			
Occupation and level ³	Number of			Middle	range ⁶	or more exp percent of th	iose in all		
	employees 4	Mean	Median	First quartile	Third quartile	establishment Employment	s combine Mean salarie		
Accountants and auditors									
Accountants I	2,029	\$988	\$963	\$897	\$1,057	31	\$109		
	5,565	1,171	1,178	1,035	1,317	43	110		
		1,301	1,282	1,145	1,461	29	108		
Accountants IV	5,603	1,530	1,506	1,360	1,696	29	104		
	2,803	1,866	1,845	1,652	2,055	41	103		
uditors I	- 456	1,041	997	880	1,214	35	111		
	973	1,139	1,080	959	1,300	36	109		
uditors III — uditors IV — udit	1,698	1,342	1,296	1,150	1,500	34	105		
uditors IV	1,226	1,623	1,591	1,425	1,772	39	104		
thief accountants III	233	2,370	2,272	2,037	2,740	29	108		
Thief accountants III	143	2.683	2,673	2,317	2,990	45	100		
Attorneys									
· ————	_ 172	1,405	1,404	1,250	1,563	30	111		
Attorneys II	172 448	1,606	1,575	1,424	1,765	33	109		
Attorneys III	637	1,997	1,962	1,750	2,225	33	100		
ttornevs IV	780	2,448	2,353	2,086	2,749	39	10-		
ttorneys V	- 487	2,878	2,858	2,517	3,150	48	10.		
ttorneys Vttorneys VI	331	3,442	3,332	2,916	3,940	5.3	. 10		
Buyers									
Buyers I	814	1,052	1,064	926	1,183	20	116		
Buyers II	3,184	1,202	1,170	1,040	1,345	26	108		
		1,381	1,364	1,216	1,528	40	104		
Buyers IV	3,197	1,583	1,528	1,376	1,735	63	100		
Personnel management									
ob analysts II	142	1.090	1,061	976	1,226	51	10-		
ob analysts III	404	1,307	1,322	1,172	1,442	63	105		
ob analysts IV	348	1,585	1,584	1,441	1,730	71	103		
		1 005	2,041	1,676	2,257	6	120		
Arectors of personnel II	157	1,995 2,477	2,499	2,083	2,770	15	119		
Directors of personnel II	120	2.866	2,778	2,496	3,150	42	10		
Chemists and engineers									
Chemists II	606	1,062	1,050	1,000	1,145	39	108		
		1,168	1,166 1,400	1,066 1,275	1,266 1,545	44 36	100		
Chemists III ————————————————————————————————	2,940 4,256	1,409 1,682	1,400	1,525	1,345	42	10		
hemists IV	3,089	2,015	2,007	1,790	2,200	43	10		
Chemists VI	1,879	2.336	2,316	2,124	2,516	47	10		
Chemists V	- 639	2,821	2,757	2,504	2,993	41	108		
Ingineers I	7,331	1,090	1.075	1,010	1,155	50	10		
Ingineers II	- 15,022	1,213	1,196	1,112	1,292	52	10		
Ingineers III	46, 953	1,409	1,399	1,280	1,535	56	10		
Engineers IV	67,609	1,671 1,906	1,655	1,516 1,745	1,821 2,060	59 61	103 102		
Ingineers v	48,970 23,640	2,212	2,186	1,999	2,080	57	102		
Engineers VII	10,751	2,441	2,390	2,141	2,685	66	10		
Agineers V Ingineers VI Ingineers VII Ongineers VIII Ongineers VIII	3,012	2,875	2,782	2,520	3,133	72	10		
Technical support									
Engineering technicians I	2,082	776	743	691	. 860	59	108		
		877	858	775	983	47	10		
Engineering technicians III	11,013	972	961	856	1,076	48	10		
Engineering technicians III	17,178	1,114	1,108	1,016	1,201	59	10		
	14,440	1,251	1,239	1,117	1,369	75	101		

Table 3. Average salaries: Establishments employing 2,500 workers or more-Continued

(Employment and average monthly salaries for selected professional, administrative, technical, and clerical occupations in private industry in establishments employing 2,500 workers or more, ² United States except Alaska and Hawaii, March 1975)

·			Monthly	salaries 5		Levels in est		
Occupation and level	Number of			Middle	range 6	or more expressed as percent of those in all establishments combined Mean Employment salaries		
	employees 4	Mean	Median	First quartile	Third quartile			
Technical support—Continued	İ			•				
Drafter-tracers Drafters II Drafters III	2,040 5,607 8,604 13,733	\$720 834 1,022 1,313	\$710 808 1,004 1,227	\$634 709 892 1,076	\$772 935 1,120	37 28 29 45	\$113 111 109 110	
Clerical supervisory			1			1 1		
Keypunch supervisors II ——————————————————————————————————	360 378 135	1,030 1,108 1,227	1,003 1,088 1,206	831 930 1,040	1,176 1,280 1,375	21 31 47	117 111 103	
Clerks, accounting I Clerks, file I Clerks, file I Clerks, file II Clerks, file III Keypunch operators I Keypunch operators II Messengers Stenographers, general Stenographers, senior Typists I Typists II	16, 731 16, 195 4, 318 4, 244 2, 422 12, 781 12, 655 6, 142 13, 493 15, 615 11, 517 13, 016	688 854 514 609 710 709 758 565 711 787 602 670	675 813 488 576 691 689 737 534 700 782 570 643	570 694 452 503 590 582 639 469 603 647 503	782 997 554 698 824 804 869 640 804 912 681 755	20 23 18 22 34 22 29 27 36 38 22	116 114 112 117 111 120 111 109 109 108 114	

for standard work schedules; i.e., the straight-time salary corresponding to the employee's normal work schedule excluding overtime hours. Non-production bonuses are excluded, but cost-of-living payments and incentive earnings are included.

6 The middle range (interquartile) used here is the central part of the array excluding the upper and lower fourths of the employee distribution.

I For scope of study, see table in appendix A.

Includes data from 6 large companies that provided companywide data unidentified by size of establishment.

3 Occupational definitions appear in appendix C.

4 Occupational employment estimates relate to the total in all establishments within scope of the survey and not the number actually surveyed. For further explanation, see appendix A, p. 29.

5 Salaries reported relate to the standard salaries that were paid

Table 4. Employment distribution by salary: Professional and administrative occupations

(Percent distribution of employees in selected professional and administrative occupations by monthly salary, United States except Alaska and Hawaii, March 1975)

		A	ccountant	s			Audi	tors			Chief acc	ountants	
Monthly salary	I	11	ш	IV	v	I	П	ш	IA	I	II	ш	IV
\$ 600 and under \$ 625 \$ 625 and under \$ 650 \$ 650 and under \$ 675 \$ 675 and under \$ 700	1.2 5 3.5 2.1	- - -		1111	- - -	2.5	- - -		-	- - -	- - - -	 -	- - -
\$ 700 and under \$ 725	2.0 1.2 6.0 4.7	(1.0) 1.4 1.3 1.3	-	-	- - -	3.3 1.1 3.4 3.7	2.0 .8 2.8 1.9	· -	-	- - - -	- - -	- - -	-
\$ 800 and under \$ 825	5.5 8.0 6.0 6.8	1.9 2.5 5.1 4.2	(1.8) 1.2 .7	1 1 1	- - -	6.1 11.1 4.2 11.2	2.0 1.9 4.9 4.5	(3.0)	- - -	-	-		-
\$ 900 and under \$ 925	6.5 6.6	4.6 4.9 6.2 6.8	2.3 2.0 3.2 3.1	1 1 1	- - -	7.9 3.5 5.5 4.3	7.6 6.4 4.4 4.6	1.7 .4 1.5 2.0	-			-	-
\$1,000 and under \$1,050 \$1,050 and under \$1,100 \$1,100 and under \$1,150 \$1,150 and under \$1,250 \$1,200 and under \$1,250	8, 9 5, 7 2, 6 1, 9	10.8 10.2 7.2 6.2 4.8	8, 4 9, 6 10, 4 10, 7 8, 6	(1, 1) 1, 1 3, 0 3, 5 4, 6	(0.6)	12, 5 6, 1 2, 1 2, 1 2, 3	12.9 9.6 6.4 7.5 6.0	5.5 8.1 5.8 9.3 8.6	(1, 2) 2, 3 1, 8 3, 3	1.5			- - -
\$ 1, 250 and under \$ 1, 300	1.4 .6 1.3 (.3)	5.6 3.8 7.2 1.3 1.2	8.8 7.2 4.5 4.4 3.5	8, 1 9, 3 11, 1 10, 1 8, 9	1.0 1.7 1.6 2.5 5.6	2, 3 1, 3 3, 0 . 3	3.7 1.4 1.4 2.0 1.4	11.6 9.2 8.0 6.5 4.4	3.0 8.0 4.2 10.0 10.8	10.5 2.2 5.0 5.7 14.0	0.2 5.7 4.7	2.3 .3	- - - -
\$1,500 and under \$1,550	- - - -	(.6) - -	2.0 3.8 1.2 (2.3)	8, 5 6, 3 5, 2 4, 1 3, 5	5.7 6.5 6.1 9.8 6.7	-	2. 7 (. 6)	3.8 2.4 1.8 1.2 1.5	8. 2 7. 2 6. 5 9. 4 3. 6	7.9 7.2 2.4 15.1 4.8	3.5 15.2 5.4 7.8 10.9	2.5 .4 I.5 1.9	- - - -
\$1,750 and under \$1,800	1 -		- - -	3.4 2.8 1.8 1.2 (2.5)	6.5 6.6 6.0 5.5 4.3	-	-	(3,6)	3.2 4.3 2.8 1.6 2.3	. 2 4. 8 1. 8 3. 3 5. 3	11.6 6.0 5.7 5.2 2.3	4.9 .5 7.9 7.5 4.9	(0.6) 1.9 .6 3.5
\$2,000 and under \$2,050	-	- - -	- - - -	- - - -	3.3 3.9 2.7 3.1 2.2	- - - -		- - - -	1.0 1.6 (3.6)	4, 2 1, 8 (2, 2)	2.5 4.0 1.4 2.9	2.9 6.0 6.6 6.4 5.8	1.9 .3 1.6 .9 7.3
\$ 2, 250 and under \$ 2, 300	-	- - -	- - - -		1.4 2.4 1.2 5	- - -	-	- - - -	- - -	- - - - ,	.2 .4 .8 .3	3.8 4.4 2.5 4.0 6.1	3.8 2.8 4.4 3.5 5.7
\$2,500 and under \$2,600	-	-	-	- - -	(1,6)	1	-	-	- - - -		1.9 (.8)	4.8 1.9 1.0 .8 2.6	6.3 5.4 13.2 8.5 6.0
\$ 3, 000 and under \$ 3, 100	_		-	- - - -	- - - -		- - - -	- - - -	- - - -			5.3 (.3) - -	6.9 3.8 .6 3.8 1.3
\$ 3, 500 and under \$ 3, 600	-	- - - -	-	-	-	- - - -	-		- - -	-	-	- - -	2.2 .3 1.9
Total	ł.	100.0	100.0	100.0	100.0	100.0	100,0	100.0	100,0	100,0	100.0	100.0	100.0
Number of employees	6,507	12,806	29,738	19,228	6, 765	1,286	2,732	5, 036	3, 130	456	1, 159	798	317
Average monthly salary	\$908	\$1,065	\$1,205	\$1,468	\$1,805	\$941	\$1,049	\$1,278	\$1,567	\$1,607	\$1,777	\$2,186	\$2,674

Table 4. Employment distribution by salary: Professional and administrative occupations-Continued

(Percent distribution of employees in selected professional and administrative occupations by monthly salary, United States except Alaska and Hawaii, 1 March 1975)

Monthly salary			Attorn	eys		
Monthly Salary	I	II	III	IV	v	VI
850 and under \$ 875	1.2	-	-	-	_]	_
875 and under \$ 900	. 5	-	-	-	-	-
900 and under \$ 925	2.5	-	-	-	-	-
925 and under \$ 950950 and under \$ 975	3.0	-	-	-	-	-
975 and under \$1,000	2.1	-			-	-
1,000 and under \$1,050	9.3	2.0	. 1		,	
1. 050 and under \$1. 100	2.6	2.6	-		- 1	-
1. 100 and under \$ 1. 150	9.5	1.6	- [-	-	-
1, 150 and under \$ 1, 200	12.6	4, 8 2, i	(0, 1)	_	-	-
					_	_
1, 250 and under \$ 1, 300	14. 2 6. 0	10.4 10.8	2.9		-	-
1. 350 and under \$ 1. 400	5.3	5.5	2.4	-		_
, 400 and under \$ 1, 450	7.2	10.3	2.0	-		-
1, 450 and under \$1,500	2.8	7.5	4, 8	-	-	•
1,500 and under \$1,550	4.4	7.8	3.6	(1.2)		
1 600 and under \$1 650	2.6	9.3 3.7	4. 2 5. 6	2.3	-	-
l, 650 and under \$1,700	3.3	4,8	5.1	1.2		-
, 700 and under \$ 1, 750	. 4	3.2	6, 6	2.6	-	-
,750 and under \$1,800	1.6	2.5	6.8	1,1	-	_
, 800 and under \$ 1, 850	1.4	3.6	3.8 9.1	2.6	-	-
1,900 and under \$1,950	- (11)	1.0	5.4	2.8	(1.5)	
, 950 and under \$2,000	-	1.2	6.5	2.5	1, 1	-
2,000 and under \$2,050	-	1.1	4.8	3.9	1.1	
. 050 and under \$2, 100	-	(3.0)	3.2	10,6	1.4	0.
, 100 and under \$2, 150, 150 and under \$2, 200	- 1		2.8 3.8	3.6 5.5	1.4	1,
, 200 and under \$2, 250	-	-	2,5	4. 2	2.1	:
, 250 and under \$2, 300	_	_	1.9	4, 1	5, 1	1.
2. 300 and under \$2. 350	-	-	2.2	6.7	1.2	
2, 350 and under \$ 2, 4002, 400 and under \$ 2, 450	- 1.	:	1.9	5.3 4.0	3.4 5.8	3. (1. (
, 450 and under \$2,500	-	-	1.5	3.8	5.9	1.0
2,500 and under \$2,600	_	_	1.2	6.7	5.8	1. (
600 and under \$2,700	-	-	2.2	4.6	8, 5	3.
, 700 and under \$ 2, 800	-	-	1.0	4.8 4.3	7.1	2.
, 900 and under \$3,000	- 1	-	(.7)	2.9	5.0 9.3	3. 7 5. 6
000 and under \$ 3 100	_	_		2.0	5.4	4.
. 100 and under \$ 3. 200		-		2.2	5. 6	4.
. 200 and under \$ 3. 300	-	· •	-	(3.3)	5, 1	8.
, 300 and under \$ 3, 400	-	-		-	4, 0 3, 8	7. 11.
,500 and under \$3,600						
600 and under \$3,700			- 1	-	3. 0 2. 1	6. · 2. ·
. 700 and under \$ 3, 800	-	-	-	-	1.8	3.
, 800 and under \$ 3, 900, 900 and under \$ 4, 000				-	1.0 (2.4)	2. · 3. !
, 000 and under \$ 4, 100					V/	
. 100 and under \$ 4, 200	-		-	-	-	3. i 4. !
200 and under \$4 300	-	-	-	-	-	1.9
, 300 and under \$ 4, 400	-		-	-	-	1,6
	į				-	
,500 and under \$4,600 ,600 and under \$4,700	_	-	-	-	_	1.0
. 700 and under \$ 4. 800	-	- 1	-	- 1	-	2.2
, 800 and over						2,4
Total	100.0	100.0	100.0	100.0	100.0	100.0
mber of employees	571	1, 341	1, 953	1, 991	1,021	627
erage monthly salary	\$1,268	\$1,480	\$1,880	\$ 2, 347	\$ 2, 837	\$ 3, 420
	¥ ., ===	¥ -,	Ų-, 000	Ψ-4-2-24	φ 🛶 υυ ι	φ J, +61

Table 4. Employment distribution by salary: Professional and administrative occupations—Continued

(Percent distribution of employees in selected professional and administrative occupations by monthly salary, United States except Alaska and Hawaii, 1 March 1975)

16-4111		Buyer	s	
Monthly salary	I	п	ш	IV
nder \$ 625	(2, 9)	_	_	· · · · · · · · · · · · · · · · · · ·
625 and under \$650	2.5			
25 and under 5 050		- 1	- 1	-
50 and under \$ 675	4.1	- i	-	-
75 and under \$ 700	2.6	-	-	-
00 and under \$725	4.3	, ÷	-	-
25 and under \$ 750	3. 7	(2, 1)	-	-
50 and under \$ 775	4.6	1.2	-	-
75 and under \$ 800	6.8	.9	-	• •
00 and under \$ 825	4.0	2.1	_	_
5 and under \$ 850	5.5	1,9	- i	-
0 and under \$ 875	5.6	2.2	- i	_
5 and under \$ 900	6.2	2.9	-	-
!	6.0	4.3	_	
00 and under \$ 925 25 and under \$ 950	3. 2	3.8	(2.7)	
5 and under \$ 950				-
0 and under \$ 975	2.6	4.4	1.2	-
5 and under \$1,000	6.1	. 5.0	1.1	-
000 and under \$1,050	8.0	10.7	4,0	(1, 1)
050 and under \$1,100	5. 8	10.2	4.6	1.0
100 and under \$1,150	5, 1	9.1	7, 1	1.7
150 and under \$ 1, 200	3. 7	9.0	8. 9	2.0
150 and under \$1,200	3.4	6.4	8. 7	3.1
200 and under \$1,250	J. 4	0.4	u.,	J
250 and under \$1,300	1.5	5.5	9.6	5.9
300 and under \$1,350	1.0	5.0	8,5	4,5
350 and under \$1,400	(1.0)	3.8	9.7	6, 6
400 and under \$1 450	`_'	2.5	7.5	7.9
450 and under \$1,500	-	2.0	5,5	8.9
500 and under \$ 1,550		1.5	4,5	9.7
500 and under \$1,550	-	1.3	3.9	8.3
550 and under \$1,600	-	1.0	3.3	6.7
600 and under \$1,650	-		2.2	6.0
650 and under \$1,700	- }	(1.3)		
700 and under \$1,750	-	-	1.4	3. 4
750 and under \$1,800	-	-	1.8	3.0
800 and under \$1,850	- 1	-	1,0	3, 5
850 and under \$1,900	- i	- [1.2	2.1
900 and under \$1.950	- 1	-	(1, 8)	2.4
950 and under \$ 2,000	-	-	-	2.9
000 and under \$2,050	_	_	_	1.7
050 and under \$2, 100	- I	_	- I	1,5
100 and under \$2, 150	_	_	_	1.6
150 and under \$2, 200		_ 1	_	1.1
200 and over	<u></u>		<u> </u>	3, 4
Total	100.0	100.0	100.0	100,0
mber of employees	4, 100	12, 063	13, 232	5,047
	1		21. 222	A1 500
rage monthly salary	\$ 905	\$1,111	. \$1,333	\$1,582

Table 4. Employment distribution by salary: Professional and administrative occupations—Continued

(Percent distribution of employees in selected professional and administrative occupations by monthly salary. United States except Alaska and Hawaii, 1 March 1975)

		Job analysts		T	Directors	of personnel		
Monthly salary	11	·III	IV	1	II	III	IV	v
\$ 650 and under \$ 675	0.7	-	-	-		-	-	-
\$ 700 and under \$ 725	.4 .7	-	-	:	-	-		-
\$ 800 and under \$ 825	3.6 10.0 11.1	(1.7) 1.6 .3	-	-		-	- - -	-
\$ 900 and under \$ 925 \$ 925 and under \$ 950 \$ 950 and under \$ 975 \$ 975 and under \$ 1,000	4,3 1,1 2,5 4,7	4.8 1.4 2.5 1.4		0.9	-	-	-	-
\$ 1,000 and under \$ 1,050	13.3 5.4 11.5 9.3 3.2	6.2 7.8 7.3 6.7 8.9	(2.6) 2.4 1.2 3.5	3.3 4.7 10.2 6.3 8.8	0.3 2.2 .6	-	-	-
\$ 1,250 and under \$ 1,300	5.4 7.2 1.4 1.4 (•7)	7.8 8.4 8.4 5.4 6.7	7.9 2.6 9.3 7.1 6.9	6. 4 5. 1 2. 8 10. 1 5. 4	5.3 6.5 3.0 8.1 8.2	(1.4)	- - - -	-
\$ 1,500 and under \$ 1,550	- - - -	5. 1 2. 0 2. 6 3. 0 (. 2)	8.5 7.9 9.8 5.1 6.5	9. 7 7. 8 2. 7 5. 5	10.9 8.0 4.8 8.3 2.5	1.8 2.4 5.0 6.9 6.9	-	
\$ 1,750 and under \$ 1,800	- - -	-	5.5 1.6 3.3 1.8 3.0	1.5 1.9 2.5 .1 2.2	4.7 4.1 3.0 1.9 2.7	3.5 1.6 3.6 2.4 11.1	(1.0) 3.1 6.3	- - -
\$ 2,000 and under \$ 2,050	- - -		1.8 (1.4)	1,4	1.3 2.1 1.2 1.7 1.9	5.8 6.6 6.2 1.0 2.4	6.3 6.3 .7 .3 4.2	- - 2.5
\$2,250 and under \$2,300	- - -	1,1111		- - - -	.6 .4 .9 .2 2.3	4.6 3.7 2.8 4.7 3.1	2.8 1.7 3.8 2.4 3.5	Z. 5 1. 3
\$2,500 and under \$2,600	:	- - - - -	- - - -	- - - -	1.5	2.0 2.5 2.8 1.1	4.2 6.3 8.4 4.2 4.5	3.8 8.8 2.5 3.8 17.5
\$3,000 and under \$3,100	1111	- - - -	- - -	- - - -	- - - -	1. 9 (1. 9)	11, 1 5, 9 , 3 1, 7 3, 8	5. 0 1. 3 1. 3 15. 0 1, 3
\$3,500 and under \$3,600		-	-	- - - -	- - - -		3.1 .3 .3 1.7 1.4	1.3 7.5 3.8 3.8
\$ 4,000 and over			•			_	-	²16, 3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100, 0	100.0
Number of employees	279	644	492	1,008	1,896	1,062	287	80
Average monthly salary	\$1,045	\$1,246	\$1,538	\$1,401	\$1,661	\$2,086	\$2,653	\$3,320

Table 4. Employment distribution by salary: Professional and administrative occupations—Continued

(Percent distribution of employees in selected professional and administrative occupations by monthly salary, United States except Alaska and Hawaii, 1 March 1975)

		<u> </u>		Cher	nists .			•
Monthly salary	I	II	ш	IV	v	VI	VII	VIII
\$ 700 and under \$ 725	6.7	(0-()	-	_	-	-	-	-
\$ 725 and under \$ 750	1.3	(0.6)	-] [-	-	_	-
\$ 775 and under \$ 800	.7	.5	-	_	-	-	-	-
\$ 800 and under \$ 825	2. 1 2. 1	.2	-		<u>-</u>	-	-	-
\$ 850 and under \$ 875	3, 1 5, 2	2,5	(2.1)		_		-	-
\$ 900 and under \$ 925	6.5	2.5	1.4	_	_	_	_	_
\$ 925 and under \$ 950	7.3	3.1	.7	-	-	<u>-</u>		-
\$ 950 and under \$ 975	7. 1 5. 7	3.7 5.0	1.0	-	_	-	-	-
\$ 1,000 and under \$ 1,050	19. 2	12.7	4.4	-	-	-	-	· -
\$ 1,050 and under \$ 1,100 \$ 1,100 and under \$ 1,150	14.4 7.6	12.3 12.1	5. 8 7. 7	(2.1)	-	-	-] -
\$ 1,150 and under \$ 1,200 \$ 1,200 and under \$ 1,250	7.2 2.2	11.0 9.7	8.2 9.2	1.7	-	-	-	
\$ 1,250 and under \$ 1,300	(- 9)	8.6	10.5	2.7	_	_	_	-
\$ 1,300 and under \$ 1,350 \$ 1,350 and under \$ 1,400	-	3.5 2.9	9.1 9.5	6.1 6.0	(2,3)	-		-
\$ 1,400 and under \$ 1,450 \$ 1,450 and under \$ 1,500	-	2.8	7.5 5.8	6, 2 9, 0	2.5 3.3	-		_
	_		4,3	9.1	3,2	_	_	_
\$ 1,500 and under \$ 1,550 \$ 1,550 and under \$ 1,600	-		3.7	8.2	5. 6 5. 0	(2.5)	-	-
\$ 1,600 and under \$ 1,650 \$ 1,650 and under \$ 1,700	-	-	2.6	7.5 7.5	7.5	1.4	-	-
\$ 1,700 and under \$ 1,750	-	_	1, 3	5.9	6.9	1.8		-
\$ 1,750 and under \$ 1,800 \$ 1,800 and under \$ 1,850	-	-	(2.0)	6.1	7. 0 6. 2	3.6 2.5	(1.9) 1.0	-
\$ 1,850 and under \$ 1,900 \$ 1,900 and under \$ 1,950	-	_	<u> </u>	3.9	6.1 5.2	6.0 5.0	1.0	-
\$ 1,950 and under \$ 2,000	-	-	-	2.7	5.6	5.7	1, 0	-
\$ 2,000 and under \$ 2,050	-	-	<u>-</u>	1.7	5, 3 5, 2	4.8 6.0	2.9	-
\$ 2,050 and under \$ 2,100 \$ 2,100 and under \$ 2,150	-	:	-	(2.6)	3.6	5. 1 5. 1	4.0	-
\$ 2,150 and under \$ 2,200 \$ 2,200 and under \$ 2,250	-		-		3.6 2.6	6.4	3. 1	-
\$ 2,250 and under \$ 2,300	-	-	-	-	2.7	5.0	5.2	. (1.9)
\$ 2,300 and under \$ 2,350	-		=		2.4 1.3	7. 0 3. 7	3, 8 5, 7	2.4 8.0
\$ 2,400 and under \$ 2,450 \$ 2,450 and under \$ 2,500	-	-	-	:	1. 1 1. 4	4.3 4.9	2.9	2.9
\$ 2,500 and under \$ 2,600	-		_	_	2.1	5.9	7.2	2.2
\$2,600 and under \$2,700 \$2,700 and under \$2,800	-	-	-	:	(2.2)	3.9 3.8	9, 7 8, 9	7.0 7.2
\$ 2.800 and under \$ 2.900	_	_	1 =	-	_	1.5	6. 0 7. 2	3.6 7.2
\$ 2,900 and under \$ 3,000	_	-		_	_	1.0	2,2	6.7
\$3,000 and under \$3,100 \$3,100 and under \$3,200		:	-	:] -	(2.2)	3.2	9.4
\$3,200 and under \$3,300 \$3,300 and under \$3,400	-	:			-	-	2.5	6.7 4.1
\$ 3,400 and under \$ 3,500	-	i -	-	-	-	-	.3	6.3
\$3,500 and under \$3,600 \$3,600 and under \$3,700	-	:	-	:	-	-	(3.2)	2.9
\$ 3,700 and under \$ 3,800	-	<u>-</u>	-] :	-	-		4.3
\$ 3,900 and under \$ 4,000	_	-	-	-	-	-	-	1.4
\$ 4,000 and under \$ 4,100	-	-	-	-	-	-	<u>-</u>	1.2
\$4,100 and under \$4,200 \$4,200 and under \$4,300	-	-	:	-	-	:		1.2
\$ 4,300 and under \$ 4,400	-	:	:	-	-	:	-	1.4
\$ 4,500 and over			-				_	3.1
Total	100, 0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	1,574	3,215	8,090	10, 134	7,238	3,977	1,566	415
Average monthly salary	\$983	\$1,107	\$1,298	\$1,600	\$1,892	\$2,227	\$2,614	\$3,155
Actorage monuncy salary		L	1 / 0	1	L	I	1	

Table 4. Employment distribution by salary: Professional and administrative occupations—Continued

(Percent distribution of employees in selected professional and administrative occupations by monthly salary, United States except Alaska and Hawaii, 1 March 1975)

Monthly salary	Engineers										
Tronding Straty	ŗ	11	Ш	IV .	v	VI	ΛΠ	νш			
nder \$ 900	3.1	-	•	_	_	-	-	_			
900 and under \$ 925	2.0	l <u>-</u>	_	<u>-</u>	_	_					
925 and under \$ 950	2.6	(2.7)	-		_	1 2	1 -	· -			
950 and under \$ 975	. 7.2	1.5	-	_			1]	1 -			
975 and under \$ 1,000	10.2	2.6	(1,7)	-	-	_	<u> </u>				
1,000 and under \$ 1,050	18. 9	8.6	1.8	_	1 _		_				
1,050 and under \$ 1,100	17.2	12,6	2.8	_	1 -	1 -	1 -	_			
1, 100 and under \$1,150	13.3	14.7	5.3	-) _	_	1				
1, 150 and under \$ 1,200		15.9	7,3	(1.6)	_	_	_	_			
1,200 and under \$1,250	6.5	12,0	8, 8	1.5	-	-	-] -			
1,250 and under \$1,300	4.8	10.4	11.2	2.2	_	_	_	1 _			
1,300 and under \$ 1,350	1.7	7.0	11.7	4.0	(1,5)	i -	1 _	1 -			
1,350 and under \$1,400	(1.1)	4.4	10.2	6.3	1.3	_	1 -	1 =			
1,400 and under \$1,450	-	3.3	8, 9	6.9	1.3	-	_				
1,450 and under \$1,500	- .	1.8	7.8	8.6	2.3	-	-	_			
1,500 and under \$1,550	-	(2,6)	6.0	9.5	2.9	_	_				
1,550 and under \$1,600	-	` • '	5. 1	9.1	3.5	(1.8)	1 .	1 [
1,600 and under \$1,650	-		4.3	8.6	5.0	1.3	1 -	1 - 5			
1,650 and under \$1,700	-	-	3,6	7.7	8.2	1. 7	! _	_			
1,700 and under \$ 1,750	-	-	1.8	6.6	7.3	2.6	-	_			
1,750 and under \$1,800			(1.9)	5.7	8, 2	2.7	_				
1,800 and under \$1.850		_	1 ' - '	5.4	8.5	4.2	(3,0)	1 [
1,850 and under \$ 1,900		-	_	4.2	7.8	5.3	1.2	1 -			
1,900 and under \$1,950	-	-	-	3.4	7.2	6.1	1.9	1 -			
1,950 and under \$2,000	-	-	-	3.9	6.8	6.4	3, 5	-			
2,000 and under \$2,050	-	i -	_	1.7	5.1	5.7	5.7	(1.6)			
2,050 and under \$2,100	-	-	_	1, 1	5.8	6.3	5. 7	1.2			
2, 100 and under \$2, 150	-	-	<u> </u>	(1.9)	3.9	6.0	5.9	9			
2, 150 and under \$2,200	-	ļ -	-	\ \ - \ \	3.2	6.4	5. 8	1.4			
2,200 and under \$2,250	-	-	-	-	2.5	5.?	5. 7	2.1			
2,250 and under \$2,300	-	-	_	-	2.2	5.5	5, 0	1, 6			
2,300 and under \$2,350	-	-	-	-	1.6	5.1	4.7	2.4			
2,350 and under \$2,400	-	-	-	-	1.1	4.4	4.7	3.5			
2,400 and under \$2,450	-	-	-	-	(2.9)	3.9	4.2	5.6			
2,450 and under \$2,500	-	-	-	-	- '	3.4	4,3	5. 1			
2,500 and under \$2,600	_	-	-	_	_	5.6	9.0	10.9			
2,600 and under \$2,700	-	-	-	-	i -	3.5	6.8	9. 2			
2,700 and under \$2,800	-	-	-	-	l -	2.5	6.4	8. 1			
2,800 and under \$2,900	-	-	-	-	-	1.4	5, 1	7.0			
2,900 and under \$3,000	-	-	-	-	-	1.0	3.6	8.4			
3,000 and under \$3,100	-	-	-	-	_	(1.4)	2.8	6.1			
3,100 and under \$3,200	-	-	-	-	l -	` - '	1.7	4.5			
3,200 and under \$3,300	-	-	-	-	l -	-	1.0	4.5			
3,300 and under \$3,400	-	-	-	-	ì -	-	(2.4)	3.8			
3,400 and under \$3,500	-	-	-	-	-	-	'-'	2.2			
3,500 and under \$3,600	-	i -	-	-	-	_	_	2.7			
3,600 and under \$3,700	-	-	i -	-	-	-	-	1,0			
3,700 and under \$3,800	-	į -	-	-		i -	-	1, 4			
3,800 and under \$3,9003,900 and over	-	[]	1 -	1 :] -	-	-	1.5			
Total	300.0	100.0			<u>-</u>		 	3.5			
	100, 0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			
imber of employees	14, 592	29,084	84,519	114, 108	80,836	41,314	16,239	4,170			
erage monthly salary	\$1,076	\$1,183	\$1,361	\$1,620	\$1,869	\$2,176	\$2,425	\$2,843			

NOTE: To avoid showing small proportions of employees scattered at or near the extremes of the distributions for some occupations, the percentage of employees in these intervals have been accumulated and are shown in the interval above or below the extreme interval containing at least 1 percent. The percentage representing these employees are shown in parentheses. Because of rounding, sums of individual items may not equal 100.

¹ For scope of study, see table in appendix A.

Workers were distributed as follows: 1.3 percent at \$4,000 to \$4,100; 2.5 percent at \$4,200 to \$4,300; 1.3 percent at \$4,200 to \$4,300; 1.3 percent at \$4,400 to \$4,500; 1.3 percent at \$4,400 to \$4,500; 1.3 percent at \$4,400 to \$4,500; 1.3 percent at \$4,900 to \$5,000; and 2.5 percent at \$5,000 to \$5,100.

Table 5. Employment distribution by salary: Technical support occupations and keypunch supervisors

(Percent distribution of employees in selected technical support occupations and keypunch supervisors by monthly salary, United States except Alaska and Hawaii, 1 March 1975)

Monthly salary		Engine	ering tec	hnicians	-,	Drafter -		Drafters		Ke	ypunch a	upervisc	rs
Monthly Selecty	1	11	Ш	IV	v	tracers	I	II	III	I	п	III	IA
\$375 and under \$400	-	_	-	-	_	0.1	-	-	_	_	_	-	-
\$ 400 and under \$ 425	(0.8) 1.0 1.0 1.2	- - - -		- - -	- - -	1.3 3.1 3.9 4.7	- - (1.4)	- - -	=	=	- - -	- - -	-
\$ 500 and under \$ 525	3.6 2.7 5.5 3.4	- - (1.6)	- - - -	- - -	- - - -	5.9 7.4 7.0 6.9	3.1 1.6 3.9 2.9	- - -	- - -	0.3 1.2 .5	(1.3)	- 1, 2	
\$ 600 and under \$ 625	5.8 6.1 9.1 6.4	1.1 2.0 6.1 7.1	- - (1, 3)	-	- - -	7.3 6.7 8.3 7.6	5.8 5.8 7.8 8.9	(1.6) 2.0 2.3	=	.3 9.5 8.7 14.3	1.0 3.0 3.1 3.7	.2 .2 2.4 1.0	-
\$ 700 and under \$ 725	10.2 7.2 4.9 4.6	6.4 6.0 7.9 9.1	2.7 2.9 5.3 4.6	(1.6)	- - -	5.0 9.0 4.1 2.7	8. 1 7. 3 5. 9 6. 9	2.2 3.6 4.6 5.2	- - -	13.3 4.3 10.1 7.3	5.9 6.5 4.1 7.6	1.8 4.5 1.8 .7	= =
\$ 800 and under \$ 825	3.7 4.2 4.3 1.8	7.4 6.5 5.5 5.4	5.2 5.8 7.1 6.0	1.1 2.0 2.5 3.1	- - (1,0)	2.3 1.3 (5.4)	4.3 4.7 3.9 3.1	5.2 7.0 8.0 5.5	(2.3) 1.8 2.0 2.4	10.6 4.5 .8 .2.6	9.7 5.0 7.6 3.0	4.8 5.6 2.6 9.2	(0.7) 2.4 2.1 2.8
\$ 900 and under \$ 925	2.9 1.9 1.3 1.2	4.0 3.4 3.3 3.5	7.9 6.2 5.0 5.5	4.2 3.8 4.5 5.7	1.0 1.0 1.1 1.4	- - -	2.5 1.8 2.0 1.5	5.4 5.1 5.7 6.1	3.3 3.7 4.6 5.9	1.4 .4 2.7 .8	6.2 2.8 2.2 5.0	5.0 5.2 3.8 2.7	1.4 1.4 2.8 4.5
\$1,000 and under \$1,050 \$1,050 and under \$1,100 \$1,100 and under \$1,150 \$1,150 and under \$1,200 \$1,200 and under \$1,250	3.4 1.2 .4 -	5.9 2.6 3.0 1:3 (.9)	9.2 8.8 5.7 3.9 2.6	13.1 12.9 14.6 8.7 7.1	4.9 12.2 10.2 11.8 11.2	- - - -	2.5 1.5 (2.9)	8.7 6.0 4.6 3.9 2.0	9. 7 8. 8 8. 9 9. 1 6. 6	1.2 1.6 .1 1.6	5.6 3.7 5.0 2.0 1.4	14.1 5.6 5.1 6.8 3.7	13.9 6.3 7.6 8.3 8.7
\$1,250 and under \$1,300 \$1,300 and under \$1,350 \$1,350 and under \$1,400 \$1,400 and under \$1,450 \$1,450 and under \$1,550	-	- - - -	2.9 (1.6)	4.5 4.0 3.2 1.7 1.1	12.1 8.3 6.0 6.5 3.9	- - -	- - - -	1.3 1.0 1.0 (1.9)	4.5 5.7 2.6 2.3 2.0	.1 .3 1.0	1.0 1.0 (2.7)	2.9 2.7 .8 1.1 2.8	2.8 5.2 14.6 2.1 2.1
\$1,500 and under \$1,550 \$1,550 and under \$1,600 \$1,600 and under \$1,650 \$1,650 and under \$1,700 \$1,700 and under \$1,750	-	-	- - - -	(, 8) - -	3.1 2.8 (1.5) -	- - - -	- - - -	- - - -	1.5 1.3 1.5 1.9	- - - -	-	(1.7)	2.8 4.5 1.0 1.7 (.3)
\$1,750 and under \$1,800 \$1,800 and under \$1,850 \$1,850 and under \$1,900 \$1,900 and under \$1,950 \$1,950 and over	-	- - -	- - - -	-	- - -	- - - -	- - - -	- - - -	1.5 1.9 1.1 .8 1.0	-		- - - -	-
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	3,542	12,245	22,853	29,342	19, 158	5,470	20,313	29,764	30,285	1, 199	1,747	1,207	288
Average monthly salary	\$719	\$ 83 1	\$950	\$1,092	\$1,236	\$640	\$749	\$ 935	\$1, 191	\$766	\$ 883	\$ 998	\$1, 193

¹ For scope of study, see table in appendix A.

NOTE: To avoid showing small proportions of employees scattered at or near the extremes of the distributions for some occupations, the percentages of employees in these intervals have been accumulated and

are shown in the interval above or below the extreme interval containing at least 1 percent. The percentages representing these employees are shown in parentheses. Because of rounding, sums of individual items may not equal 100.

Table 6. Employment distribution by salary: Clerical occupations

(Percent distribution of employees in selected clerical occupations by monthly salary, United States except Alaska and Hawaii, 1 March 1975)

Monthly salary	Clerks,	accounting		Clerks, fil	e	Keypunch	operators	Messen-	Stenog- raphers,	Stenog- raphers	Ту	pists
Monthly salary	I	II	I-	11	III	. I	m	gers	general	senior	1	11
\$ 300 and under \$ 325 \$ 325 and under \$ 350 \$ 350 and under \$ 375 \$ 375 and under \$ 400	0.1 1.0 1.7	- - -	0. 1 1. 2 8. 2 12. 3	0.3 3.1 4.7	0.5 2.7	(05) 1.3		0.3 3.6 5.4	0.8		- (0.9) 3.1	0.1
\$ 400 and under \$ 425 \$ 425 and under \$ 450 \$ 450 and under \$ 475 \$ 475 and under \$ 500	3.6 5.6 6.3 6.8	(1.3) 1.2	18.3 12.5 13.0 10.4	10.7 12.9 13.0 8.8	1.2 3.5 3.5 6.2	3.5 5.7 7.1 7.9	(0.5) 1.9 2.1	11.6 10.2 9.0 10.4	1.3 2.3 4.0 4.3	- - (2.9)	8.0 10.3 11.6 10.1	1.8 2.7 4.3 6.3
\$500 and under \$525	9.8 9.6 8.8 6.2	3.0 3.8 4.9 4.9	7.8 4.4 3.0 2.0	8.4 7.5 7.2 4.0	8.7 4.5 8.4 7.8	10.1 9.9 8.7 7.2	4.3 5.1 7.5 7.1	9.4 8.4 7.1 5.3	7.6 7.4 8.5 7.4	2.0 3.2 4.4 6.3	12.4 9.7 7.7 5.7	8.9 8.7 9.4 6.9
\$ 600 and under \$ 625	6.9 4.6 5.1 3.6	7.3 6.7 7.3 5.5	1.2 2.0 (3.5)	3.1 2.4 2.4 1.6	6.6 5.1 7.3 3.8	6.2 5.4 4.2 3.4	9. 2 8. 7 9. 4 7. 3	4.6 3.0 2.5 1.3	6.8 6.4 6.4 4.5	7.2 6.1 7.7 6.6	3. 9 3. 4 2. 9 2. 1	8.3 6.7 7.1 5.7
\$ 700 and under \$ 725	3.1 3.6 2.2 2.1	6.0 5.9 5.1 5.4	1 7 1	.9 1.4 2.3 1.4	4.7 2.7 3.5 3.6	2.4 2.3 2.4 2.4	5. 1 5. 5 4. 0 4. 0	1.1 1.6 1.0 1.2	4. 0 4. 6 3. 8 2. 8	6.5 6.0 5.6 5.6	2.2 1.5 1.3 (3.3)	4.1 5.0 2.5 2.4
\$ 800 and under \$ 825	1.4 .9 .9 1.3	4.1 2.9 2.4 2.6		(3, 7) - -	2.6 2.1 1.4 1.3	1.7 .9 1.5 1.1	2.5 1.9 2.7 2.7	(3.0) - -	2.2 2.3 2.4 3.0	4.6 4.6 2.7 3.6	- - -	1.7 1.3 1.3 1.3
\$ 900 and under \$ 925	1.2 (3.5) - -	2.4 2.0 2.3 2.3	. . - -	-	1.6 1.5 1.2 1.0	.8 .6 .6	2.5 2.0 1.3		2.4 1.8 1.2 (1.9)	2.6 2.1 3.2 1.8		(3•9) - - -
\$1,000 and under \$1,050 \$1,050 and under \$1,100 \$1,100 and under \$1,150 \$1,150 and under \$1,200 \$1,200 and under \$1,250	- - - -	3.6 2.7 1.5 1.6 (1.4)			1.7 (1.2)	. 6 1. 1 (²)	.4 .6 1.1 (²)		-	1.8 1.8 (1.2)		
Total	100.0	100.0	100.0	100.0	100.0	100-0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees	83,611	69,858	24,669	19,637	7,151	58,011	44,240	22,803	37,949	41,137	52,671	35,530
Average monthly salary	\$595	\$748	\$460	\$520	\$640	\$593	\$683	\$518	\$650	\$732	\$530	\$621

For scope of study, see table in appendix A. Less than 0.05 percent.

NOTE: To avoid showing small proportions of employees scattered at or near the extremes of the distributions for some occupations, the per-

centages of employees in these intervals have been accumulated and are shown in the interval above or below the extreme interval containing at least 1 percent. The percentages representing these employees are shown in parentheses. Because of rounding, sums of individual items may not equal 100.

Table 7. Occupational employment distribution: By industry division

(Percent distribution of employees in selected professional, administrative, technical, and clerical occupations by industry division, ² United States except Alaska and Hawaii, March 1975)

Occupation	Manu- facturing	Public utilities ³	Wholesale trade	Retail trade	Finance, insurance, and real estate	Selected services ⁴
Professional and administrative						
Accountants Auditors Chief accountants Attorneys Buyers Job analysts Directors of personnel Chemists Engineers	66 37 69 33 85 67 69 95	12 15 6 20 5 4 4 (5)	7 9 4 (5) (5) (5) (5)	5 7 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8 31 7 37 (*) 21 13 (*) (*)	(5) (5) (5) (4) 4 (5) (5)
Technical support						
Engineering technicians	77 70	7 9	(3)	(⁵)	(5) (5)	16 18
Clerical supervisory			İ			
Keypunch supervisors	31	11	13	7	35	(5)
Clerks, accounting ————————————————————————————————————	42 21 42 33 49 36	14 6 11 11 18 10	10 6 12 10 7 5	15 5 8 6 (⁵)	18 61 26 37 20 43	(5) (5) (5) 4 (5) (5)

¹ Each occupation includes the work levels shown in table 1.
² For scope of study, see table in appendix A.
³ Transportation (limited to railroad, local and suburban passenger, deep sea water, and air transportation industries), communication, elec-

tric, gas, and sanitary services.

Engineering and architectural services; and commercially operated research, development, and testing laboratories only.

Less than 4 percent,

Table 8. Relative salary levels: Occupation by industry division

(Relative salary levels for selected professional, administrative, technical, and clerical occupations by industry division, United States except Alaska and Hawaii, March 1975)

(Average salary for each occupation in all industries=100)

(Average salary for each occupation in all indust	Manu- facturing	Public utilities ³	Wholesale trade	Retail trade	Finance, insurance, and real estate	Selected services4
Professional and administrative						
Accountants Auditors Chief accountants Attorneys Buyers Job analysts Directors of personnel Chemists Engineers	101 107 101 107 100 104 100 100	104 105 104 102 107 110 (⁵) (⁵)	94 97 94 105 106 (⁵) (⁵) (⁵) (⁵)	94 93 100 94 103 102 (⁵) (5)	96 92 98 92 (⁵) 84 99 (⁵)	99 111 99 (5) 97 113 (5) 108 98
Technical support						
Engineering technicians	98 100	112 106	(⁵) 91	(⁵) 99	(⁵) 91	102 98
Clerical supervisory						
Keypunch supervisors	102	125	103	94	91	102
<u>Clerical</u>				0.0	10	102
Clerks, accounting Clerks, file Keypunch operators Messengers Stenographers Typists	103 108 103 105 102 106	119 137 121 121 112 115	94 103 97 99 98 99	90 97 94 93 95 104	89 93 90 91 85 91	103 115 101 97 98 101

¹ Each occupation includes the work levels shown in table 1. In computing relative salary levels for each occupation by industry division, the total employment in each work level in all industries surveyed was used as a constant employment weight to eliminate the effect of differences in the proportion of employment in various work levels within each occupation.

² For scope of study, see table in appendix A.

³ Transportation (limited to railroad, local and suburban passenger, transportation (infliced to ratifoad, local and subtroan passenger, deep sea water, and air transportation industries), communication, electric, gas, and sanitary services.

Engineering and architectural services; and commercially operated research, development, and testing laboratories only.

Insufficient employment in 1 work level or more to warrant separate presentation of data.

Table 9. Average weekly hours: Occupation by industry division

(Average standard weekly hours' for employees in selected professional, administrative, technical, and clerical occupations² by industry division, ³ United States except Alaska and Hawaii, March 1975)

Occupation	Manu- facturing	Public utilities ⁴	Wholesale trade	Retail trade	Finance, insurance, and real estate	Selected services ⁵
Professional and administrative						
Accountants	39.5 39.5 39.5 39.0 40.0 39.5 39.5 39.5	39.5 39.5 39.5 39.5 39.5 (6) (6)	39.5 40.0 40.0 38.0 38.5 (6) (6) (6) 39.0	39. 0 39. 5 38. 0 38. 0 40. 0 (6) (6)	38. 0 38. 0 39. 0 38. 0 (6) 37. 5 38. 5 (6)	40.0 39.5 40.0 (6) 40.0 40.0 (6) 39.0 39.5
Technical support						
Engineering technicians Drafters	40.0 40.0	39.5° 39.5	(⁶) 40.0	(⁶) 39. 0	(⁶) 38 . 5	39.5 40.0
Clerical supervisory						
Keypunch supervisors	39.5	39.0	39,5	39.0	38.0	40.0
Clerical				20.5	38.0	39.5
Clerks, accounting Clerks, file Keypunch operators Messengers Stenographers Typiste	39.5 39.5 39.5 39.0 39.5 39.5	39.0 39.0 39.5 38.5 39.5 39.0	39. 0 39. 0 39. 0 38. 5 39. 5 39. 0	39.5 39.0 39.0 39.5 39.0	38.0 38.0 38.0 37.5 38.0 38.0	39. 5 39. 0 39. 5 39. 5 39. 5

Based on the standard workweek for which employees receive their regular straight-time salary. If standard hours were not available, the standard hours applicable for a majority of the office work force in the establishment were used. The average for each job category was rounded to the nearest half hour.

2 Each occupation includes the work levels shown in table 1.

3 For scope of study, see table in appendix A.

⁴ Transportation (limited to railroad, local and suburban passenger, deep sea water, and air transportation industries), communication, electric, gas, and sanitary services.

5 Engineering and architectural services; and commercially operated research, development, and testing laboratories only.

6 Insufficient employment in 1 work level or more to warrant separate researching of data.

presentation of data.

Appendix A. Scope and Method of Survey

Scope of survey

The survey relates to establishments in the United States, except Alaska and Hawaii, in the following industries: Manufacturing; transportation, communication, electric, gas, and sanitary services; wholesale trade; retail trade; finance, insurance, and real estate; engineering and architectural services; and commercially operated research, development, and testing laboratories. Excluded are establishments employing fewer than the minimum number of workers, as indicated in the accompanying table for each industry division, at the time of reference of the universe data (generally, first quarter of 1973). The variable minimum employment size, which was first adopted in the 1966 survey, more nearly equalizes the white-collar employment of establishments among the various industry divisions.

The estimated number of establishments and the total employment within the scope of this survey, and within the sample actually studied, are shown for each major industry division in table A-1. These estimates also are shown separately for establishments employing 2,500 workers or more and those located in Standard Metropolitan Statistical Areas.¹

Timing of survey and method of collection

Survey data collection was planned so that the data would reflect an average reference period of March 1975.²

Data were obtained by Bureau field economists who visited a nationwide sample of representative establishments within the scope of the survey between January

¹The metropolitan area data in the 1975 survey relate to all 263 SMSA's (within the 48 States surveyed) as revised through April 1974, by the U.S. Office of Management and Budget. Earlier surveys represented SMSA's ranging in numbers from 188 in 1962 and earlier surveys to 229 in the surveys from 1970 to 1972.

² The March payroll period has been used since the 1972 survey. The 1967 through 1971 surveys had a June reference period for all occupations. Prior to the 1967 study, the average reference period was February for clerical and drafting jobs, and March for all other occupations. Until 1963, reports listed "Winter" as the reference period. From 1963 through 1966, the more specific designation "February-March" was used.

and May. Employees were classified according to occupation and level, with the assistance of company officials, on the basis of the BLS job definitions which appear in appendix C. In comparing actual duties and responsibilities of employees with those in the survey definitions, extensive use was made of company occupational descriptions, organization charts, and other personnel records.

Sampling and estimating procedures

The sampling procedures called for the detailed stratification of all establishments within the scope of the survey by location, industry, and size of employment. From this universe, a nationwide sample of about 3,000 establishments (not companies) was selected systematically.3 Each industry was sampled separately, the sampling rates depending on the employment size of the industry. Within each industry, a greater proportion of large than of small establishments was included. In combining the data, each establishment was weighted according to its probability of selection, so that unbiased estimates were generated. To illustrate the process, where one establishment out of four was selected, it was given a weight of 4, thus representing itself plus three others. In instances where data were not available for the original sample member, an alternate of the same original probability of selection was chosen in the same industry-size classification. Where there was no suitable substitute for the original sample member, the missing unit was accounted for by assigning additional weight to the sample member that most closely resembled the missing unit.

Nature of data collected and reported

The reported salaries relate to standard salaries paid for standard work schedules, i.e., the straight-time salary

³ A few of the largest employers, together employing approximately 1,160,000 workers, gave data on a companywide basis. These companies were eliminated from the universe to which the preceding procedure applies. The sample count includes the establishments of these companies within the scope of the survey.

Table A-1. Number of establishments and workers within scope of survey¹ and number studied, by industry division, March 1975

	[Withi	n scope of su	rvey ¹	Studied				
•	Minimum employment			cers in shments			ers in shments		
Industry division	in estab- lishments in scope of survey	Number of estab- lishments	Total	Professional, adminis- trative, supervisory, and clerical ²	Number of estab- lishments	Total	Professional, adminis- trative, supervisory, and clerical ²		
United States —all		•							
industries ¹		29,386	18,704,579	7,524,037	3,022	6,497,350	2,836,259		
Manufacturing	250	14,379	11,158,304	3,432,070	1,677	3,975,428	1,403,002		
services	100	3,010	2,282,489	1,140,012	355	1,141,790	592,052		
Wholesale trade	100	3,809	799,042	415,850	219	60,955	37,023		
Retail trade Finance, insurance, and	250	2,866	2,435,051	622,951	296	665,693	188,063		
real estate	100	4,785	1,762,068	1,710,632	382	532,458	528,622		
Engineering and architectural services; and commercially operated research, develop- ment, and testing			<i>.</i>						
laboratories only	100	537	267,625	202,522	93	121,026	87,497		
Metropolitan areas - all									
industries ⁴	-	22,734	15,506,486	6,770,999	2,520	6,009,619	2,702,170		
Manufacturing	250	9,379	8,350,573	2,861,720	1,251	3,528,588	1,291,506		
services	100	2,168	2,080,439	1,061,277	314	1,120,277	582,124		
Wholesale trade	100	3,389	738,478	393,800	209	59,513	36,498		
Retail trade	250	2,757	2,389,531	614,686	291	663,243	187,683		
real estate	100	4,514	1,688,035	1,642,606	366	524,087	521,412		
Engineering and architectural services; and commercially operated research, develop- ment, and testing				1	,				
laboratories only	100	527	259,430	196,910	89	113,911	82,947		
Establishments employing 2,500 workers or more — all					Ì				
industries	-	1,075	6,270,105	2,685,442	700	4,834,940	2,107,912		
Manufacturing	-	619	3,756,854	1,398,889	422	3,014,082	1,096,762		

The study relates to establishments with total employment at or above the minimum limitation indicated in the first column; excludes Alaska and Hawaii.

sea water (foreign and domestic), and air transportation industries as defined in the 1967 edition of the Standard Industrial Classification Manual.

column; excludes Alaska and Hawaii.

Includes executive, administrative, professional, supervisory, and clerical employees, but excludes technicians, drafters, and sales personnel.

Limited to railroad, local and suburban passenger, deep

⁴ Standard Metropolitan Statistical Areas in the United States, except Alaska and Hawaii, as revised through April 1974 by the U.S. Office of Management and Budget.

corresponding to the employee's normal work schedule excluding overtime hours. Nonproduction bonuses are excluded, but cost-of-living payments and incentive earnings are included. The average salaries presented relate to full-time employees for whom salary data are available.

Data presented on year-to-year changes in average salaries are subject to limitations which reflect the nature of the data collected. Changes in average salaries reflect not only general salary increases and merit or other increases given to individuals while in the same work level category, but they also may reflect other factors such as employee turnover, expansions or reductions in the work force, and changes in staffing patterns within establishments with different salary levels. For example, an expansion in force may increase the proportion of employees at the minimum of the salary range established for a work level, which would tend to lower the average, whereas a reduction or a low turnover in the work force may have the opposite effect. Similarly, year-to-year promotions of employees to higher work levels of professional and administrative occupations may affect the average of each level. The established salary ranges for such occupations are relatively wide, and promoted employees, who may have been paid the maximum of the salary scale for the lower level, are likely to be replaced by less experienced employees who may be paid the minimum. Occupations most likely to reflect such changes in the salary averages are the higher levels of professional and administrative occupations and single-incumbent positions such as chief accountant and director of personnel.4

About 8 percent of the establishments which were asked to supply data would not do so. These corresponded to an estimated total in the universe studied of approximately 1,740,000 workers, about 9 percent of 18,704,579. The noncooperating units were replaced by others in the same industry-size-location classes. If all similar units were already in the sample, the weights of the included establishments were increased to account for the missing units.

Some companies had an established policy of not disclosing salary data for some of their employees. Often this policy related to higher level positions, because these employees were considered part of the management group or were classified in categories which included only one employee. In nearly all instances, however, information was provided on the number of such employees and the appropriate occupational classification. It was thus possible to estimate the proportion

of employees in each category for whom salary data were not available. In all but 7 of the 72 occupational levels surveyed, the proportion of employees for whom salary data were not available was less than 5 percent.⁵

Comparisons between establishments that provided salary data for each specific occupational level and those not doing so indicated that the two classes of establishments did not differ materially in industries represented, employment, or salary levels for other jobs in this series for which data were available.

Occupational employment estimates relate to the total in all establishments within the scope of the survey and not the number actually surveyed. Employees for whom salary data were not available were not taken into account in the estimates.6 These estimates were derived by weighting full-time employees in the occupations studied in each sample establishment in proportion to the number of establishments it represented within the scope of the survey. For example, if the sample establishment was selected from a group of four establishments with similar employment in the same industry and region, each full-time employee found in an occupation studied was counted as four employees in compiling the employment estimates for the occupations. In addition, the survey occupations were limited to employees meeting the specific criteria in each survey definition and were not intended to include all employees in each field of work.7 For these reasons, and because of differences in occupational structure among establishments, the estimates of occupational employment obtained from the sample of establishments studied serve only to indicate the relative importance of the occupations and levels as defined for the survey. These qualifications of the employment estimates do not materially affect the accuracy of the earnings data.

Wherever possible, data were collected for men and women separately. If identification by sex was not

 5 Those with 5 percent and over were: Directors of personnel V-21 percent; directors of personnel IV-20 percent; chief accountants I-11 percent; directors of personnel III-9 percent; chief accountants II-7 percent; directors of personnel I-6 percent; attorneys VI-5 percent.

⁶ Also not taken into account were a few instances in which salary data were available for employees in an occupation, but where there was no satisfactory basis for classifying the employees by work level.

⁷Engineers, for example, are defined to permit classification of employees engaged in engineering work within a band of eight levels, starting with inexperienced engineering graduates and excluding only those within certain fields of specialization or in positions above those covered by level VIII. In contrast, such occupations as chief accountants and directors of personnel are defined to include only those with responsibility for a specified program and with duties and responsibilities as indicated for each of the more limited number of work levels selected for study.

⁴These types of occupations also may be subject to greater sampling error, as explained in the paragraph headed Estimates of sampling error.

possible, all workers were reported as the predominant sex. In the professional, administrative, and technical support occupations, men were sufficiently predominant to preclude presentation of separate data by sex. For those clerical occupations in which both men and women are commonly employed, separate data by sex are available from the area wage survey reports compiled by metropolitan area. The occupations and work levels in which women accounted for 5 percent or more of the employment were distributed according to the proportion of women employees as follows:

95 or more	File clerks I and II, all levels of keypunch operators, stenographers, and typists
90-94	Accounting clerks I, file clerks III, key- punch supervisors II
85-89	Keypunch supervisors I
80-84	Keypunch supervisors III and accounting clerks II
65-69	Keypunch supervisors IV
45-49	Messengers
35-39	Job analysts 11
25-29	Drafter-tracers and buyers I
20-24	Accountants I, job analysts III, chemists I.

10-14 Auditors I and II, attorneys I, chemists III, engineering technicians II, job analysts IV, and drafters I 5-9 Accountants III, directors of personnel I

and engineering technicians I

Accountants II and chemists II

and II, attorneys II and III, engineers I, engineering technicians III, buyers II and III, chemists IV, and drafters II

Occupation and level

Conversion of salary rates

Women (percent)

Salary data for the selected occupations were collected in the form in which they were most readily available from company records, i.e., on a weekly, biweekly, semimonthly, monthly, or annual basis. For the initial tabulations, the salary data were first converted to a weekly basis for the clerical and drafting occupations and to a monthly basis for all others. The factors used to convert these data were as follows:

	Conversion factors						
Payroll basis	To weekly basis	To monthly basis					
Weekly	1,0000	4.3450					
Biweekly	.5000	2.1725					
Semimonthly	.4602	2.0000					
Monthly	.2301	1.0000					
Annual	.0192	.0833					

All salaries presented in the tables were rounded to the nearest dollar. Average monthly salaries presented in tables 1,2, and 3 and annual salaries presented in tables 1 and 2 for the clerical and drafting occupations are

derived from average weekly salaries (to the nearest penny) by use of the factors 4.345 and 52.14, respectively, and rounding the results. To obtain annual salaries for all other occupations in tables 1 and 2, average monthly salaries (to the nearest penny) are multiplied by 12 and rounded to the nearest dollar.

Method of determining median and quartile values

Median and quartile values presented in this report were derived from distributions of employees by salary using \$1 class intervals. Weekly salary class intervals were used for drafters and clerical occupations and monthly salary class intervals were used for all other occupations. The weekly values were multiplied by 4.345 to obtain monthly values and by 52.14 to obtain annual values. The annual values for other than drafters and clerical occupations were obtained by multiplying monthly values by 12.

Estimates of sampling error

The survey procedure yields estimates with widely varying sampling errors, depending on the frequency with which the job occurs and the dispersion of salaries. Thus, for the 72 surveyed occupational work levels, the relative sampling errors of the average salaries were distributed as follows: 43 were under 2 percent; 16 were 2 and under 4 percent; 8 were 4 and under 6 percent; and 5 were 6 percent and over. These sampling errors measure the validity of the band within which the true average is likely to fall. Thus, for an occupation with a sample average monthly salary of \$1,000 and sampling error of 4 percent, the chances are 19 out of 20 that the true average lies within the band of \$960 to \$1,040.

Methods of computation of annual percent increases

The percent increases for each occupation in text table 1 were obtained by adding the aggregate salaries for each level in each of two successive years (employment in the most recent year, to eliminate the effects of year-to-year employment shifts, multiplied by the average salaries in both years) and dividing the later sum by the earlier sum. The resultant relative, less 100, is the percent of increase. Changes in the scope of the survey and in occupational definitions were incorporated into the series on a continuing basis as soon as two

⁸The 6 percent and over group included: Directors of personnel V-9.9 percent; job analysts III-8.5 percent; auditors I-8.5 percent; attorneys II-7.4 percent; file clerk III-6.3 percent.

comparable periods were available. The increases for each of the two broad occupational groups were obtained by averaging the increases of the occupations within the group. The increases for all survey occupations were determined by averaging the increases for the two broad occupational groups. The annual increases were then linked together to obtain the changes that have occurred since this series was begun and to compute average annual rates of increase for each occupation and group and for all occupations combined.

The year-to-year percent increases for each group in text table 2 were determined by adding average salaries for all occupations in the group for 2 consecutive years, and dividing the later sum by the earlier sum. The resultant relative, less 100, shows the percent of increase. Changes in the scope of the survey or in the occupational definitions were incorporated into the series as soon as comparable data for 2 consecutive periods were available. The 14-year trends were obtained by linking changes for the individual periods.

Appendix B. Survey Changes in 1975

Changes in occupational coverage

A 6-level computer operator job and a 5-level secretary job included in the 1974 study were not surveyed in 1975.

Appendix C. Occupational Definitions

The primary purpose of preparing job definitions for the Bureau's wage surveys is to assist its field staff in classifying into appropriate occupations, or levels within occupations, workers who are employed under a variety of payroll titles and different work arrangements from establishment to establishment and from area to area. This permits the grouping of occupational wage rates representing comparable job content. To secure comparability of job content, some occupations and work levels are defined to include only those workers meeting specific criteria as to training, job functions, and responsibilities. Because of this emphasis on interestablishment and interarea comparability of occupational content, the Bureau's occupational definitions may differ significantly from those in use in individual establishments or those prepared for other purposes. Also see note referring to the definitions for the drafting and clerical occupations at the end of this appendix.

Accountants and Auditors

ACCOUNTANT

Performs professional accounting work requiring knowledge of the theory and practice of recording, classifying, examining, and analyzing the data and records of financial transactions. The work generally requires a bachelor's degree in accounting or, in rare instances, equivalent experience and education combined. Positions covered by this definition are characterized by the inclusion of work that is analytical, creative, evaluative, and advisory in nature. The work draws upon and requires a thorough knowledge of the fundamental doctrines, theories, principles, and terminology of accountancy, and often entails some understanding of such related fields as business law, statistics, and general management. (See also chief accountant.)

Professional responsibilities in accountant positions above the entry and developmental levels include several such duties as:

Analyzing the effects of transactions upon account relationships;

Evaluating alternative means of treating transactions;

Planning the manner in which account structures should be developed or modified;

Assuring the adequacy of the accounting system as the basis for reporting to management;

Considering the need for new or changed controls;

Projecting accounting data to show the effects of proposed plans on capital investments, income, cash position, and overall financial condition;

Interpreting the meaning of accounting records, reports, and statements:

Advising operating officials on accounting matters; and Recommending improvements, adaptations, or revisions in the accounting system and procedures.

(Entry and developmental level positions provide opportunity to develop ability to perform professional duties such as those enumerated above.)

In addition to such professional work, most accountants are also responsible for assuring the proper recording and documentation of transactions in the accounts. They, therefore, frequently direct non-professional personnel in the actual day-to-day maintenance of books of accounts, the accumulation of cost or other comparable data, the preparation of standard reports and statements, and similar work. (Positions involving such supervisory work but not including professional duties as described above are not included in this description.)

Excluded are accountants whose principal or sole duties consist of designing or improving accounting systems or other nonoperating staff work, e.g., financial analysis, financial forecasting, tax advising, etc. (The

criteria that follow for distinguishing among the several levels of work are inappropriate for such jobs.) Note, however, that professional accountant positions with responsibility for recording or reporting accounting data relative to taxes are included, as are operating or cost accountants whose work includes, but is not limited to, improvement of the accounting system.

Some accountants use electronic data processing equipment to process, record, and report accounting data. In some such cases the machine unit is a subordinate segment of the accounting system; in others it is a separate entity or is attached to some other organization. In either instance, providing the primary responsibility of the position is professional accounting work of the type otherwise included, the use of data processing equipment of any type does not of itself exclude a position from the accountant description nor does it change its level.

Accountant I

General characteristics. At this beginning professional level, the accountant learns to apply the principles, theories, and concepts of accounting to a specific system. The position is distinguishable from non-professional positions by the variety of assignments; rate and scope of development expected of the incumbent; and the existence, implicit or explicit, of a planned training program designed to give the entering accountant practical experience. (Terminal positions are excluded.)

Direction received. Works under close supervision of an experienced accountant whose guidance is directed primarily to the development of the trainee's professional ability and to the evaluation of his potential for advancement. Limits of assignments are clearly defined, methods of procedure are specified, and kinds of items to be noted and referred to supervisor are identified.

Typical duties and responsibilities. Performs a variety of accounting tasks such as: Examining a variety of financial statements for completeness, internal accuracy, and conformance with uniform accounting classifications or other specific accounting requirements; reconciling reports and financial data with financial statements already on file, and pointing out apparent inconsistencies or errors; carrying out assigned steps in an accounting analysis, such as computing standard ratios; assembling and summarizing accounting literature on a given subject; preparing relatively simple financial statements not involving problems of analysis or presentation; and preparing charts, tables, and other

exhibits to be used in reports. In addition to such work, may also perform some nonprofessional tasks for training purposes.

Responsibility for direction of others. Usually none.

Accountant II

General characteristics. At this continuing developmental level the professional accountant makes practical applications of technical accounting practices and concepts beyond the mere application of detailed rules and instructions. Assignments are designed to expand his practical experience and to develop his professional judgment in the application of basic accounting techniques to simple professional problems. He is expected to be competent in the application of standard procedures and requirements to routine transactions, to raise questions about unusual or questionable items, and to suggest solutions. (Terminal positions are excluded.)

Direction received. Work is reviewed closely to verify its general accuracy and coverage of unusual problems, to insure conformance with required procedures and special instructions, and to assure his professional growth. His progress is evaluated in terms of his ability to apply his professional knowledge to basic accounting problems in the day-to-day operations of an established accounting system.

Typical duties and responsibilities. Performs a variety of accounting tasks, e.g., prepares routine working papers, schedules, exhibits, and summaries indicating the extent of his examination, and presenting and supporting his findings and recommendations. Examines a variety of accounting documents to verify accuracy of computations and to ascertain that all transactions are properly supported, are in accordance with pertinent policies and procedures, and are classified and recorded according to acceptable accounting standards.

Responsibility for the direction of others. Usually none, although he may supervise a few clerks.

Accountant III

General characteristics. Performs professional operating or cost accounting work requiring the standardized application of well-established accounting principles, theories, concepts, and practices. Receives detailed instructions concerning the overall accounting system and its objectives, the policies and procedures under

which it is operated, and the nature of changes in the system or its operation. Characteristically, the accounting system or assigned segment is stable and well established (i.e., the basic chart of accounts, classifications, the nature of the cost accounting system, the report requirements, and the procedures are changed infrequently).

Depending upon the workload involved, the accountant may have such assignments as supervision of the day-to-day operation of: (a) The entire system of a subordinate establishment, or (b) a major segment (e.g., general accounting; cost accounting; or financial statements and reports) of a somewhat larger system, or (c) in a very large and complex system, may be assigned to a relatively narrow and specialized segment dealing with some problem, function, or portion of work which is itself of the level of difficulty characteristic of this level.

Direction received. A higher level professional accountant normally is available to furnish advice and assistance as needed. Work is reviewed for technical accuracy, adequacy of professional judgment, and compliance with instructions through spot checks, appraisal of results, subsequent processing, analysis of reports and statements, and other appropriate means.

Typical duties and responsibilities. The primary responsibility of most positions at this level is to assure that the assigned day-to-day operations are carried out in accordance with established accounting principles, policies, and objectives. The accountant performs such professional work as: Developing nonstandard reports and statements (e.g., those containing cash forecasts reflecting the interrelations of accounting, cost budgeting, or comparable information); interpreting and pointing out trends or deviations from standards; projecting data into the future; predicting the effects of changes in operating programs; or identifying management informational needs, and refining account structures or reports accordingly.

Within the limits of his delegated responsibility, makes day-to-day decisions concerning the accounting treatment of financial transactions. Is expected to recommend solutions to complex problems and propose changes in the accounting system for approval at higher levels. Such recommendations are derived from his own knowledge of the application of well-established principles and practices.

Responsibility for the direction of others. In most instances he directs the work of a subordinate nonprofessional staff.

Accountant IV

General characteristics. Performs professional operating or cost accounting work which requires the application of well-established accounting principles, theories, concepts, and practices to a wide variety of difficult problems. Receives instructions concerning the objectives and operation of the overall accounting system. At this level, compared with level III, the accounting system or assigned segment is more complex, i.e., (a) is relatively unstable, (b) must adjust to new or changing company operations, (c) serves organizations of unusually large size, or (d) is complicated by the need to provide and coordinate separate or specialized accounting treatment and reporting (e.g., cost accounting using standard cost, process cost, and job order techniques) for different operations or divisions of the company.

Depending upon the workload and degree of coordination involved, the accountant IV may have such assignments as the supervision of the day-to-day operation of: (a) The entire accounting system of a subordinate establishment, or (b) a major segment (e.g., general accounting; cost accounting; or financial statements and reports) of an accounting system serving a larger and more complex establishment, or (c) the entire accounting system of a large (e.g., employing several thousand persons) subordinate establishment which in other respects has an accounting system of the complexity that characterizes level III.

Direction received. A higher level accountant normally is available to furnish advice and assistance as needed. Work is reviewed by spot checks and appraisal of results for adequacy of professional judgment, compliance with instructions, and overall accuracy and quality.

Typical duties and responsibilities. As at level III, a primary characteristic of most positions at this level is the responsibility of operating an accounting system or major segment of a system in the intended manner.

The accountant IV exercises professional judgment in making frequent appropriate recommendations for: New accounts; revisions in the account structure; new types of ledgers; revisions in reporting system or subsidiary records; changes in instructions regarding the use of accounts; new or refined account classifications or definitions; etc. He also makes day-to-day decisions concerning the accounting treatment of financial transactions and is expected to recommend solutions to complex problems beyond the scope of his responsibility.

Responsibility for direction of others. Accounting staff he supervises, if any, may include professional accountants.

Accountant V

General characteristics. Performs professional operating or cost accounting work which is of greater than average professional difficulty and responsibility because of the presence of unusual and novel problems or the unusual magnitude or impact of the accounting program. Typically this level of difficulty arises from (a) the large size of the accounting and operating organization, (b) the atypical nature of the accounting problems encountered, or (c) the unusually great involvement in accounting systems design and development.

Examples of assignments characteristic of this level are the supervision of the day-to-day operation of: (a) The entire accounting system of a subordinate establishment having an unusually novel and complex accounting system, or (b) the entire accounting system of a large (e.g., employing several thousand persons) subordinate establishment which in other respects has an accounting system of the complexity that characterizes level IV, or (c) the entire accounting system of a company or corporation that has a relatively stable and conventional accounting system and employs several thousand persons and has a few subordinate establishments which include accounting units, or (d) a major segment of an accounting system that substantially exceeds the characteristics described in any one of the preceding examples.

Direction received. An accountant of higher level normally is available to furnish advice and assistance as needed. Work is reviewed for adequacy of professional judgment, compliance with instructions, and overall quality.

Typical duties and responsibilities. The work is characterized by its unusual difficulty or responsibility. Accountants V typically are directly concerned on a relatively continuous basis with what the nature of the accounting system should be, with the devising or revising of the operating accounting policies and procedures that are necessary, and with the managerial as well as the accounting meaning of the reports and statements for which they are responsible. Accountants V are necessarily deeply involved in fundamental and complex accounting matters and in the managerial problems that are affected.

Responsibility for the direction of others. Accounting

staff supervised generally includes professional accountants.

AUDITOR

Performs professional auditing work requiring a bachelor's degree in accounting or, in rare instances, equivalent experience and education combined. Audits the financial records and practices of a company, or of divisions or components of the company, to appraise systematically and verify the accounting accuracy of records and reports and to assure the consistent application of accepted accounting principles. Evaluates the adequacy of the accounting system and internal financial controls. Makes appropriate recommendations for improvement as necessary. To the extent determined necessary, examines the transactions entering into the balance sheet and the transactions entering into income, expense, and cost accounts. Determines:

The existence of recorded assets (including the observation of the taking of physical inventories) and the allinclusiveness of recorded liabilities;

The accuracy of financial statements or reports and the fairness of presentation of facts therein;

The propriety or legality of transactions;

The degree of compliance with established policies and procedures concerning financial transactions.

Excluded are positions which do not require full professional accounting training because the work is confined on a relatively permanent basis to repetitive examinations of a limited area of company operations and accounting processes, e.g., only accounts payable and receivable; demurrage records and related functions, or station operations only of a railroad company; branch offices which do not engage in the full range of banking and accounting activities of the main bank; warehouse operations only of a mail order company; checking transactions to determine whether or not they conform to prescribed routines or procedures. (Examinations of such repetitive or limited nature normally do not require or permit professional audit work to be performed.)

Auditor 1

General characteristics. As a trainee auditor at the entering professional level, performs a variety of routine assignments. Typically, he is rotated through a variety of tasks under a planned training program designed to provide practical experience in applying the principles, theories, and concepts of accounting and auditing to specific situations. (Terminal positions are excluded.)

Direction received. Works under close supervision of an experienced auditor whose guidance is directed primarily to the development of the trainee's professional ability and to the evaluation of his potential for advancement. Limits of assignments are clearly defined, methods of procedure are specified, and kinds of items to be noted and referred to supervisor are identified.

Typical duties and responsibilities. Assists in making audits by performing such tasks as: Verification of the accuracy of the balances in various records; examination of a variety of types of documents and vouchers for accuracy of computations; checking transactions to assure they are properly documented and have been recorded in accordance with correct accounting classifications; verifying the count of inventories; preparing detailed statements, schedules, and standard audit working papers; counting cash and other assets; preparing simple reconciliations; and similar functions.

Auditor II

General characteristics. At this continuing developmental level the professional auditor serves as a junior member of an audit team, independently performing selected portions of the audit which are limited in scope and complexity. Auditors at this level typically have acquired knowledge of company operations, policies, and procedures. (Terminal positions are excluded.)

Direction received. Detailed instructions are furnished and the work is reviewed to the extent necessary to verify its general accuracy and coverage of unusual problems, to insure conformance with required procedures and special instructions, and to assure the auditor's professional growth. Any technical problems not covered by instructions are brought to the attention of a superior. His progress is evaluated in terms of his ability to apply his professional knowledge to basic auditing situations.

Typical duties and responsibilities. Applies knowledge of accounting theory and audit practices to a variety of relatively simple professional problems in his audit assignments, including such tasks as: The verification of reports against source accounts and records to determine their reliability; reconciliation of bank and other accounts and verifying the detail of recorded transactions; detailed examinations of cash receipts and disbursement vouchers, payroll records, requisitions, work orders, receiving reports, and other accounting documents to ascertain that transactions are properly

supported and are recorded correctly from an accounting or regulatory standpoint; or preparing working papers, schedules, and summaries.

Auditor III

General characteristics. Work at this level consists of the audit of operations and accounting processes that are relatively stable, well-established, and typical of the industry. The audits primarily involve the collection and analysis of readily available findings; there is previous audit experience that is directly applicable; the audit reports are normally prepared in a prescribed format using a standard method of presentation; and few if any major problems are anticipated. The work performed requires the application of substantial knowledges of accounting principles and practices, e.g., bases for distinguishing among capital maintenance and operating expenses; accruing reserves for taxes; and other accounting considerations of an equivalent nature.

Direction received. Work is normally within an established audit program and supervision is provided by a higher level auditor who outlines and discusses assignments. Work is spot-checked in progress. Completed assignments are reviewed for adequacy of coverage, soundness of judgment, compliance with professional standards, and adherence to policies.

Typical duties and responsibilities. The auditor examines transactions and verifies accounts; observes and evaluates accounting procedures and internal controls; prepares audit working papers and submits an audit report in the required pattern containing recommendations for needed changes or improvements. He is usually responsible for selecting the detailed audit methods to follow, choosing the audit sample and its size, determining the extent to which discrepancies need to be investigated, and deciding the depth of the analyses required to support reported findings and conclusions.

Examples of assignments involving work of this level:

As a team leader or working alone, independently conducts audits of the complete accounts and related operations of smaller or less complex companies (e.g., involving a centralized accounting system with few or no subordinate, subsidiary, or branch accounting records) or of comparable segments of larger companies.

As a member of an audit team, independently accomplishes varied audit assignments of the above described characteristics, typically major segments of complete audits, or assignments otherwise limited in scope of larger and more complex companies (e.g., complex in that the accounting system entails cost, inventory, and comparable specialized systems integrated with the general accounting system).

Illustrative of such assignments are the audit and initial review of the accounting treatment and validity of reporting of overhead expenses in a large manufacturing or maintenance organization (e.g., major repair yard of a railroad); or, the checking, verification, and balancing of all accounts receivable and accounts payable; or, the analysis and verification of assets and reserves; or, the inspection and evaluation of accounting controls and procedures.

Auditor IV

General characteristics. Auditors at this level are experienced professionals who apply thorough knowledge of accounting principles and theory in connection with a variety of audits. Work at this level is characterized by the audit of organizations and accounting processes which are complex and difficult because of such factors as: Presence of new or changed programs and accounting systems; existence of major specialized accounting functions (e.g., cost accounting, inventory accounting, sales accounting), in addition to general accounting; need to consider extensive and complicated regulatory requirements; lack of or difficulty in obtaining information; and other similar factors. Typically, a variety of different assignments are encountered over a period of time, e.g., 1 year. The audit reports prepared are comprehensive, explain irregularities, cite rules or regulations violated, recommend remedial actions, and contain analyses of items of special importance or interest to company management.

Direction received. Within an established audit program, has responsibility for independently planning and executing audits. Unusually difficult problems are discussed with the supervisor who also reviews completed assignments for adherence to principles and standards and the soundness of conclusions.

Typical duties and responsibilities. Auditors at this level have full responsibility for planning the audit, including determination of the aspects to emphasize, methods to be used, development of nonstandard or specialized audit aids such as questionnaires, etc., where previous audit experience and plans are of limited applicability.

Included in the scope of work that characterizes this level are such functions as: Evaluation of methods used for determining depreciation rates of equipment; evaluation of assets where original costs are unknown; evaluation of the reliability of accounting and reporting

systems; analysis of cost accounting systems and cost reports to evaluate the basis for cost and price setting; evaluation of accounting procurement and supply management records, controls, and procedures; and many others.

Examples of assignments involving work at this level:

As a team leader or working alone, independently plans and conducts audits of the complete accounts and related operations of relatively large and complex companies (e.g., complex in that the accounting system entails cost, inventory, and comparable specialized accounting systems integrated with the general accounting system) or of company branch, subsidiary, or affiliated organizations which are individually of comparable size and complexity.

As a member of an audit team, independently plans and accomplishes audit assignments that constitute major segments of audits of very large and complex organizations, for example, those with financial responsibilities so great as to involve specialized subordinate, subsidiary, or affiliate accounting systems that are complete in themselves.

NOTE: Excluded from level IV are auditors who, as team leaders or working alone, conduct complete audits of very large and complex organizations, for example, those with financial responsibilities so great as to involve specialized subordinate, subsidiary, or affiliate accounting systems that are complete in themselves; or are team members assigned to major segments of audits of even larger or more complex organizations.

CHIEF ACCOUNTANT

As the top technical expert in accounting, is responsible for directing the accounting program for a company or for an establishment of a company. The minimum accounting program includes: (1) General accounting (assets, liabilities, income, expense, and capital accounts, including responsibility for profit and loss and balance sheet statements); and (2) at least one other major accounting activity, typically tax accounting, cost accounting, property accounting, or sales accounting. It may also include such other activities as payroll and timekeeping, and mechanical or electronic data processing operations which are an adjunct of the accounting system. (Responsibility for an internal audit program is typically not included.)

The responsibilities of the chief accountant include all of the following:

- 1. On own responsibility, developing or adapting or revising an accounting system to meet the needs of the organization;
- 2. Supervising, either directly or through subordinate supervisors, the operation of the system with full management responsibility for the quality and quantity of work performed, training and development of subordinates, work

scheduling and review, coordination with other parts of the organization served, etc.;

- 3. Providing, directly or through an official such as a comptroller, advisory services to the top management officials of the organization served as to:
 - a. The status of financial resources and the financial trends or results of operations as revealed by accounting data, and selecting a manner of presentation that is meaningful to management;
 - b. Methods for improving operations as suggested by his expert knowledge of accounting, e.g., proposals for improving cost control, property management, credit and collection, tax reduction, or similar programs.

Excluded are positions with responsibility for the accounting program if they also include (as a major part of the job) responsibility for budgeting; work measurement; organization, methods, and procedures studies; or similar nonaccounting functions. (Positions of such breadth are sometimes titled comptroller, budget and accounting manager, financial manager, etc.)

Some positions responsible for supervising general accounting and one or more other major accounting activities but which do *not* fully meet *all* of the responsibilities of a chief accountant specified above may be covered by the descriptions for accountant.

Chief accountant jobs which meet the characteristics described are classified by level of work¹ according to (a) authority and responsibility and (b) technical complexity, using the table accompanying the definitions which follow.

Authority and Responsibility

AR-1. The accounting system (i.e., accounts, procedures, and reports to be used) has been prescribed in considerable detail by higher levels in the company or organization. The chief accountant has final, unreviewed authority within the prescribed system, to expand it to fit the particular needs of the organization served, e.g., in the following or comparable ways:

Provides greater detail in accounts and reports or financial statements;

Establishes additional accounting controls, accounts, subaccounts, and subsidiary records; and

Provides special or interim reports and statements needed by the manager responsible for the day-to-day operations of the organization served.

This degree of authority is typically found at a plant or similar subordinate establishment.

AR-2. The basic accounting system is prescribed in broad outline rather than in specific detail. While certain major financial reports, overall accounts, and general policies are required by the basic system, the chief accountant has broad latitude and authority to decide the specific methods, procedures, accounts, reports, etc., to be used within the organizational segment served. He must secure prior approval from higher levels for only those changes which would basically affect the broad requirements prescribed by such higher levels. Typical responsibilities include:

Evaluating and taking final action on recommendations proposed by subordinate establishments for changes in aspects of the accounting system or activities not prescribed by higher authority;

Extending cost accounting operations to areas not previously covered;

Changing from one cost accounting method to another; Expanding the utilization of computers within the

Expanding the utilization of computers within the accounting process; and

Preparing accounting reports and statements reflecting the events and progress of the entire organization for which he is responsible; often consolidating data submitted by subordinate segments.

This degree of authority is most typically found at intermediate organizational levels such as regional offices, or division or subsidiary headquarters. It is also found in some company level situations where the authority of the chief accountant is less extensive than is described in AR-3. More rarely it is found in plant level chief accountants who have been delegated more authority than usual for such positions as described in AR-1.

AR-3. Has complete responsibility for establishing and maintaining the framework for the basic accounting system used in the company, subject only to general policy guidance and control from a higher level company official responsible for general financial management. Typical responsibilities include:

Determining the basic characteristics of the company's accounting system and the specific accounts to be used;

Devising and preparing accounting reports and statements required to meet management's needs for data;

Establishing basic accounting policies, interpretations, and procedures;

Reviewing and taking action on proposed revisions to the company's accounting system suggested by subordinate units; and

Taking final action on all technical accounting matters.

Characteristically, participates extensively in broad company management processes by providing accounting advice, interpretations, or recommendations based on data accumulated in the accounting system and on his professional judgment and experience.

¹ Insufficient data were obtained for level V to warrant presentation of average salaries.

Table C-1. Criteria for matching chief accountants by level

Level	Authority and responsibility ¹	Technical complexity ¹	Subordinate staff of professional accountants in the system for which he is responsible.
1	AR-1	TC-1	Only one or two professional accountants, who do not exceed the accountant III job definition.
11	AR-1	TC-2	About 5 to 10 professional accountants, with at least one or two matching the accountant IV job definition.
or			
	AR-2	TC-1	About 5 to 10 professional accountants. Most of these match the accountant III job definition, but one or two may match the accountant IV job definition.
or			
	AR-3	TC-1	Only one or two professional accountants, who do not exceed the accountant IV job definition.
III.	AR-1	TC-3	About 15 to 20 professional accountants. At least one or two match the accountant V job definition.
or			
	AR-2	TC-2	About 15 to 20 professional accountants. Many of these match the accountant IV job definition, but some may match the accountant V job definition.
or			
			•
	AR-3	TC-1	About 5 to 10 professional accountants, Most of these match the accountant III job definition, but one or two may match as high as accountant V.
IV	AR-2	TC-3	About 25 to 40 professional accountants. Many of these match the accountant V job definition, but several may exceed that level.
or			
	AR-3	TC-2	About 15 to 20 professional accountants. Most of these match the accountant IV job definition, but several may match the accountant V and one or two may exceed that level.
v	AR-3	TC-3	About 25 to 40 professional accountants. Many of these match the accountant V job definition, but
	<u> </u>		several may exceed that level.

 $^{^{\}mbox{\scriptsize 1}}$ AR-1, -2, and -3 and TC-1, -2, and -3 are explained in the accompanying text.

Technical Complexity

TC-1. The organization which the accounting program serves has relatively few functions, products, work processes, etc., and these tend to be stable and unchanging. The accounting system operates in accordance with well-established principles and practices or those of equivalent difficulty which are typical of that industry.

TC-2. The organization which the accounting program serves has a relatively large number of functions, products, work processes, etc., which require substantial and frequent adaptations of the basic system to meet management needs (e.g., adoption of new accounts, subaccounts, and subsidiary records; revision of instructions for the use of accounts; improvement or expansion of methods for accumulating and reporting cost data in connection with new or changed work processes).

TC-3. The organization which the accounting program serves puts a heavy demand on the accounting organization for specialized and extensive adaptations of the

basic system to meet management needs. Such demands arise because the functions, products, work processes, etc., of the organization are very numerous, diverse, unique, or specialized, or there are other comparable complexities. Consequently, the accounting system, to a considerable degree, is developed well beyond established principles and accounting practices in order to:

Provide for the solution of problems for which no clear precedents exist; or

Provide for the development or extension of accounting theories and practices to deal with problems to which these theories and practices have not previously been applied.

Subordinate Staff

In table C-1 the number of professional accountants supervised is recognized to be a relatively crude criterion for distinguishing between various levels. It is to be considered less important in the matching process than the other criteria. In addition to the staff of professional accountants in the system for which the chief accountant is responsible, there are clerical, machine operation, bookkeeping, and related personnel.

Attorneys

ATTORNEY

Performs consultation and advisory work and carries out the legal processes necessary to effect the rights, privileges, and obligations of the company. The work performed requires completion of law school with an LL.B. degree (or the equivalent) and admission to the bar. Responsibilities or functions include one or more of the following or comparable duties:

Preparing and reviewing various legal instruments and documents, such as contracts, leases, licenses, purchases, sales, real estate, etc.;

Acting as agent of the company in its transactions;

Examining material (e.g., advertisements, publications, etc.) for legal implications; advising officials of proposed legislation which might affect the company;

Applying for patents, copyrights, or registration of company's products, processes, devices, and trademarks;

Advising whether to initiate or defend lawsuits;

Conducting pre-trial preparations; defending the company in lawsuits; and

Advising officials on tax matters, government regulations, and/or corporate rights.

Excluded from this definition are:

Patent work which requires professional training in addition to legal training (typically a degree in engineering or in a science);

Claims examining, claims investigating, or similar work for which professional legal training and bar membership is not essential;

Attorneys, frequently titled "general counsel" (and their immediate full associates or deputies), who serve as company officers or the equivalent and are responsible for participating in the overall management and formulation of policy for the company in addition to directing its legal work. (The duties and responsibilities of such positions exceed level VI as described below.)

Attorney jobs which meet the above definition are to be classified and coded in accordance with table C-2 and the definitions which follow.

D-1. Legal questions are characterized by: Facts that are well established; clearly applicable legal precedents; and matters not of substantial importance to the organization. (Usually relatively limited sums of money, e.g., a few thousand dollars, are involved.)

Examples of D-1 work:

Legal investigation, negotiation, and research preparatory to defending the organization in potential or actual lawsuits involving alleged negligence where the facts can be firmly established and there are precedent cases directly applicable to the situation.

Table C-2. Criteria for matching attorneys by level

Level	Difficulty Responsibilit of legal work 1 of job 1	Y Experience required
1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	This is the entry level. The duties responsibilities after initial orientation training are those described in D-1 and R-	and J.D. degree plus admission to the bar,
ı II	D-1 R-2	Sufficient professional experience (at least 1
or	D-2 R-1	year, usually more) at the "D-1" level to assure competence as an attorney.
111	D-2 R-2	At least 1 year, usually more, of professional
or	D-3 R-1	experience at the "D-2" level.
· · · · IV	D-2 R-3	Extensive professional experience at the
or	D-3 R-2	"D-2" or a higher level.
· · · · · · · · · · · · · · · · · · ·	D-3 R-3	Extensive professional experience at the "D-3" level.
VI	D-3 R-4	Extensive professional experience at the "D-3" and "R-3" levels.

¹ D-1, D-2, D-3 and R-1, R-2, R-3, and R-4 are explained in the accompanying text.

Searching case reports, legal documents, periodicals, textbooks, and other legal references, and preparing draft opinions on employee compensation or benefit questions when there is a substantial amount of clearly applicable statutory, regulatory, and case material.

Drawing up contracts and other legal documents in connection with real property transactions requiring the development of detailed information but *not* involving serious questions regarding titles to property or other major factual or legal issues.

D-2. Legal work is regularly difficult by reason of one or more of the following: The absence of clear and directly applicable legal precedents; the different possible interpretations that can be placed on the facts, the laws, or the precedents involved; the substantial importance of the legal matters to the organization (e.g., sums as large as \$100,000 are generally directly or indirectly involved); the matter is being strongly pressed or contested in formal proceedings or in negotiations by the individuals, corporations, or government agencies involved.

Examples of D-2 work:

Advising on the legal implications of advertising representations when the facts supporting the representations and the applicable precedent cases are subject to different interpretations.

Reviewing and advising on the implications of new or revised laws affecting the organization.

Presenting the organization's defense in court in a negligence lawsuit which is strongly pressed by counsel for an organized group.

Providing legal counsel on tax questions complicated by the absence of precedent decisions that are directly applicable to the organization's situation.

D-3. Legal work is typically complex and difficult because of one or more of the following: The questions are unique and require a high order of original and creative legal endeavor for their solution; the questions require extensive research and analysis and the obtaining and evaluation of expert testimony regarding controversial issues in a scientific, financial, corporate organization, engineering, or other highly technical area;

the legal matter is of critical importance to the organization and is being vigorously pressed or contested (e.g., sums such as \$1 million or more are generally directly or indirectly involved).

Examples of D-3 work:

Advising on the legal aspects and implications of Federal antitrust laws to projected greatly expanded marketing operations involving joint ventures with several other organizations.

Planning legal strategy and representing a utility company in rate or government franchise cases involving a geographic area including parts or all of several States.

Preparing and presenting a case before an appellate court where the case is highly important to the future operation of the organization and is vigorously contested by very distinguished (e.g., having a broad regional or national reputation) legal talent.

Serving as the principal counsel to the officers and staff of an insurance company on the legal problems in the sale, underwriting, and administration of group contracts involving nationwide or multistate coverages and laws.

Performing the principal legal work in a nonroutine major revision of the company's charter or in effectuating new major financing steps.

- R-1. Responsibility for final action is usually limited to matters covered by legal precedents and in which little deviation from standard practice is involved. Any decisions or actions having a significant bearing on the organization's business are reviewed. (Is given guidance in the initial stages of his assignment. Assignments are then carried out with moderate independence although guidance is generally available and is sought from time to time on problem points.)
- R-2. Usually works independently in investigating the facts, searching legal precedents, defining the legal and factual issues, drafting the necessary legal documents, and developing conclusions and recommendations. Decisions having an important bearing on the organization's business are reviewed. (Receives information from supervisor regarding unusual circumstances or important policy considerations pertaining to a legal problem. If trials are involved, may receive guidance from a supervisor regarding presentation, line of approach, possible line of opposition to be encountered, etc. In the case of nonroutine written presentations the final product is reviewed carefully, but primarily for overall soundness of legal reasoning and consistency with organization policy. Some (but not all) attorneys make

assignments to one or more lower level attorneys, aids, or clerks.)

- R-3. Carries out assignments independently and makes final legal determinations in matters of substantial importance to his organization. Such determinations are subject to review only for consistency with company policy, possible precedent effect, and overall effectiveness. To carry out his assignments, he deals regularly with company officers and top level management officials and confers or negotiates regularly with senior attorneys and officials in other companies or in government agencies on various aspects of his assigned work. (Receives little or no preliminary instruction on legal problems and a minimum of technical legal supervision. May assign and review work of a few attorneys, but this is not a primary responsibility.)
- R-4. Carries out assignments which entail independently planning investigations and negotiations on legal problems of the highest importance to his organization and developing completed briefs, opinions, contracts, or other legal products. To carry out his assignments he represents his organization at conferences, hearings, or trials, and personally confers and negotiates with top attorneys and top-ranking officials in private companies or in government agencies. On various aspects of his assigned work may give advice directly and personally to corporation officers and top level managers, or may work through the general counsel of the company in advising officers. (Generally receives no preliminary instruction on legal problems. On matters requiring the concentrated efforts of several attorneys or other specialists, is responsible for directing, coordinating, and reviewing the work of the attorneys involved.)

OR

As a primary responsibility, directs the work of a staff of attorneys, one, but usually more, of whom regularly perform D-3 legal work. With respect to the work directed, gives advice directly to corporation officers and top managerial officers, or may give such advice through the general counsel. (Receives guidance as to organization policy but no technical supervision or assistance except when he might request advice from, or be briefed by, the general counsel on the overall approach to the most-difficult, novel, or important legal questions. Usually reports to the general counsel or his deputy.)

Buyers

BUYER

Purchases materials, supplies, equipment, and services (e.g., utilities, maintenance, and repair). In some instances items are of types that must be specially designed, produced, or modified by the vendor in accordance with drawings or engineering specifications.

Solicits bids, analyzes quotations received, and selects or recommends supplier. May interview prospective vendors. Purchases items and services at the most favorable price consistent with quality, quantity, specification requirements, and other factors. Prepares or supervises preparation of purchase orders from requisitions. May expedite delivery and visit vendors' offices and plants.

Normally, purchases are unreviewed when they are consistent with past experience, and are in conformance with established rules and policies. Proposed purchase transactions that deviate from the usual or from past experience in terms of prices, quality of items, quantities, etc., or that may set precedents for future purchases, are reviewed by higher authority prior to final action.

In addition to the work described above, some (but not all) buyers direct the work of one or a few clerks who perform routine aspects of the work. As a secondary and subsidiary duty, some buyers may also sell or dispose of surplus, salvage, or used materials, equipment, or supplies.

NOTE: Some buyers are responsible for the purchasing of a variety of items and materials. When the variety includes items and work described at more than one of the following levels, the position should be considered to equal the highest level that characterizes at least a substantial portion of the buyer's time.

Excluded are:

- a. Buyers of items for direct sale, either wholesale or retail;
- b. Brokers and dealers buying for clients or for investment purposes;
- c. Positions that specifically require professional education and qualifications in a physical science or in engineering (e.g., chemist, mechanical engineer);
- d. Buyers who specialize in purchasing a single or a few related items of highly variable quality such as raw cotton or wool, tobacco, cattle, or leather for shoe uppers, etc. Expert personal knowledge of the item is required to judge the relative value of the goods offered and to decide the quantity, quality, and price of each purchase in terms of its probable effect on the organization's profit and competitive status;
 - e. Buyers whose principal responsibility is the super-

vision of other buyers or the management, direction, or supervision of a purchasing program;

- f. Persons predominantly concerned with contract or subcontract administration;
- g. Persons whose major duties consist of ordering, reordering, or requisitioning items under existing contracts; and
- h. Positions restricted to clerical functions or to purchase expediting work.

Buyer I

Purchases "off-the-shelf" types of readily available, commonly used materials, supplies, tools, furniture, services, etc.

Transactions usually involve local retailers, wholesalers, jobbers, and manufacturers' sales representatives.

Quantities purchased are generally small amounts, e.g., those available from local sources.

Examples of items purchased include: Common stationery and office supplies; standard types of office furniture and fixtures; standard nuts, bolts, screws; janitorial and common building maintenance supplies; and common building maintenance or common utility services.

Buyer II

Purchases "off-the-shelf" types of standard, generally available technical items, materials, and services.

Transactions usually involve dealing directly with manufacturers, distributors, jobbers, etc.

Quantities of items and materials purchased may be relatively large, particularly in the case of contracts for continuing supply over a period of time.

May be responsible for locating or promoting possible new sources of supply. Usually is expected to keep abreast of market trends, changes in business practices in the assigned markets, new or altered types of materials entering the market, etc.

Examples of items purchased include: Industrial types of handtools; electronic tube and component test instruments; standard electronic parts and components; electric motors; gasoline service station equipment; PBX or other specialized telephone services; and routine purchases of common raw materials such as standard grades and sizes of steel bars, rods, and angles.

Also included at this level are buyers of materials of the types described for buyer I when the quantities purchased are large so that local sources of supply are generally inadequate and the buyer must deal directly with manufacturers on a broader than local scale.

Buyer III

Purchases items, materials, or services of a technical and specialized nature. The items, while of a common general type, are usually made, altered, or customized to meet the user's specific needs and specifications.

Transactions usually require dealing with manufacturers. The number of potential vendors is likely to be small and price differentials often reflect important factors (quality, delivery dates and places, etc.) that are difficult to evaluate.

The quantities purchased of any item or service may be large.

Many of the purchases involve one or more of such complications as: Specifications that detail, in technical terms, the required physical, chemical, electrical, or other comparable properties; special testing prior to acceptance; grouping of items for lot bidding and awards; specialized processing, packing, or packaging requirements; export packs; overseas port differentials; etc.

Is expected to keep abreast of market and product developments. May be required to locate new sources of supply.

Some positions may involve assisting in the training or supervising of lower level buyers or clerks.

Examples of items purchased include: Castings; special extruded shapes of normal size and material; special formula paints; electric motors of special shape or speed; special packaging of items; and raw materials in substantial quantities.

Buyer 1V

Purchases highly complex and technical items, materials, or services, usually those specially designed and manufactured exclusively for the purchaser.

Transactions require dealing with manufacturers and often involve persuading potential vendors to undertake the manufacturing of custom-designed items according to complex and rigid specifications.

Quantities of items and materials purchased are often large in order to satisfy the requirements for an entire large organization for an extended period of time. Complex schedules of delivery are often involved. Buyer determines appropriate quantities to be contracted for at any given period of time.

Transactions are often complicated by the presence of one or more such matters as inclusion of: Requirements for spare parts, preproduction samples and testing, or technical literature; or patent and royalty provisions.

Keeps abreast of market and product developments. Develops new sources of supply.

In addition to the work described above, a few positions may also require supervision over a few lower level buyers or clerks. (No position is included in this level solely because supervisory duties are performed.)

Examples of items purchased include: Special purpose high cost machine tools and production facilities; raw materials of critically important characteristics or quality; parts, subassemblies, components, etc., specially designed and made to order (e.g., communications equipment for installation in aircraft being manufactured; component assemblies for missiles and rockets; and motor vehicle frames).

NOTE: Excluded are buying positions above level IV. Some buyers above level IV make purchases in such unusually large quantities that they can affect the market price of a commodity or produce other significant effects on the industry or trade concerned. Others may purchase items of either (1) extraordinary technical complexity, e.g., involving the outermost limits of science or engineering, or (2) unusually high individual or unit value. Such buyers often persuade suppliers to expand their plants or convert facilities to the production of new items or services. These types of buying functions are often performed by program managers or company officials who have primary responsibilities other than buying.

Personnel Management

JOB ANALYST

Performs work involved in collecting, analyzing, and developing occupational data relative to jobs, job qualifications, and worker characteristics as a basis for compensating employees in a fair, equitable, and uniform manner. Performs such duties as studying and analyzing jobs and preparing descriptions of duties and

responsibilities and of the physical and mental requirements needed by workers; evaluating jobs and determining appropriate wage or salary levels in accordance with their difficulty and responsibility; independently conducting or participating with representatives of other companies in conducting compensation surveys within a locality or labor market area; assisting in administering merit rating programs; reviewing changes in wages and

salaries indicated by surveys and recommending changes in pay scales; and auditing individual jobs to check the propriety of evaluations and to apply current job classifications.

Job Analyst I

As a trainee, performs work in designated areas and of limited occupational scope. Receives immediate supervision in assignments designed to provide training in the application of established methods and techniques of job analysis. Studies the least difficult jobs and prepares reports for review by a job analyst of higher level.

Job Analyst II

Studies, describes, and evaluates jobs in accordance with established procedures. Is usually assigned to the simpler kinds of both wage and salaried jobs in the establishment. Works independently on such assignments but is limited by instructions of his superior and by defined area of assignment.

Job Analyst III

Analyzes and evaluates a variety of wage and salaried jobs in accordance with established evaluation systems and procedures. May conduct wage surveys within the locality or participate in conducting surveys of broad compensation areas. May assist in developing survey methods and plans. Receives general supervision but responsibility for final action is limited.

Job Analyst IV

Analyzes and evaluates a variety of jobs in accordance with established evaluation systems and procedures, and is given assignments which regularly include responsibility for the more difficult kinds of jobs. ("More difficult" means jobs which consist of hard-to-understand work processes; e.g., professional, scientific, administrative, or technical; or jobs in new or emerging occupational fields; or jobs which are being established as part of the creation of new organizations; or where other special considerations of these types apply.) Receives general supervision, but responsibility for final action is limited. May participate in the development and installation of evaluation or compensation systems, which may include those for merit rating programs. May

plan survey methods and conduct or direct wage surveys within a broad compensation area.

DIRECTOR OF PERSONNEL

Directs a personnel management program for a company or a segment of a company. Serves top management officials of the organization as the source of advice and assistance on personnel management matters and problems generally; is typically consulted on the personnel implications of planned changes in management policy or program, the effects on the organization of economic or market trends, product or production method changes, etc.; represents management in contacts with other companies, trade associations, government agencies, etc., dealing primarily with personnel management matters.

Typically the director of personnel for a company reports to a company officer in charge of industrial relations and personnel management activities or an officer of similar level. Below the company level the director of personnel typically reports to a company officer or a high management official who has responsibility for the operation of a plant, establishment, or other segment of the company.

For a job to be covered by this definition, the personnel management program *must include* responsibility for *all* three of the following functions:

- 1. Administering a job evaluation system: i.e., a system in which there are established procedures by which jobs are analyzed and evaluated on the basis of their duties, responsibilities, and qualification requirements in order to provide a foundation for equitable compensation. Typically, such a system includes the use of one or more sets of job evaluation factors and the preparation of formal job descriptions. It may also include such related functions as wage and salary surveys or merit rating system administration. The job evaluation system(s) does not necessarily cover all jobs in the organization, but does cover a substantial portion of the organization.
- 2. Employment and placement function: i.e., recruiting actively for at least some kinds of workers through a variety of sources (e.g., schools or colleges, employment agencies, professional societies, etc.); evaluating applicants against demands of particular jobs by use of such techniques as job analysis to determine requirements, interviews, written tests of aptitude, knowledge, or skill, reference checks, experience evaluations, etc.; recommending selections and job placements to management, etc.
- 3. Employee relations and services function: i.e., functions designed to maintain employees' morale and productivity at a high level (for example, administering a formal or informal grievance procedure; identifying and recommending solutions for personnel problems such as absenteeism, high turnover, low productivity, etc.; administration of beneficial suggestions system, retirement, pension, or insurance plans, merit rating system, etc.;

overseeing cafeteria operations, recreational programs, industrial health and safety programs, etc.).

In addition, positions covered by this definition may, but do not necessarily, include responsibilities in the following areas:

Employee training and development;

Labor relations activities which are confined mainly to the administration, interpretation, and application of those aspects of labor union contracts that are essentially of the type described under (3) above. May also participate in bargaining of a subordinate nature, e.g., to negotiate detailed settlement of such matters as specific rates, job classifications, work rules, hiring or layoff procedures, etc., within the broad terms of a general agreement reached at higher levels, or to supply advice and information on technical points to the company's principal representative.

Excluded are positions in which responsibility for actual contract negotiation with labor unions as the principal company representative is a significant aspect of the job, i.e., a responsibility which serves as a primary basis for qualification requirements and compensation.

Director of personnel jobs which meet the above definition are classified by level of work² in accordance with the criteria shown in table C-3.

Table C-3. Criteria for matching directors of personnel by level

		ons level'' program ¹	4	"Development level" personnel program ²			
Number of employees in work force serviced	"Type A" organization serviced ³	"Type B" organization serviced ⁴	Number of employees in work force serviced	"Type A" organization serviced ³	"Type B" organization serviced ⁴		
250-750 1,000-5,000 6,000-12,000 15,000-25,000	 	H III IV V	250-750 1,000-5,000 6,000-12,000 15,000-25,000	II III IV V	III IV V		

^{1 &}quot;Operations level" personnel program—director of personnel servicing an organizational segment (e.g., a plant) of a company, where the basic personnel program policies, plans, objectives, etc., are established at company headquarters or at some other higher level between the plant and the company headquarters level. The personnel director's responsibility is to put these into operation at the local level, in such a manner as to most effectively serve the local management needs.

NOTE: There are gaps between different degrees of all three elements used to determine job level matches. These gaps have been provided purposely to allow room for judgment in getting the best overall job level match for each job. Thus, a job which services a work force of 850 employees should be matched with level II if it is a personnel program operations level job where the nature of the organization serviced seems to fall slightly below the definition for type B. However, the same job should be matched with level I if the nature of the organization serviced clearly falls well within the definition for type A.

Chemists and Engineers

CHEMIST

Performs professional work in research, development, interpretation, and analysis to determine the composition, molecular structure, and properties of substances; to develop or investigate new materials and

processes; and to investigate the transformations which substances undergo. Work typically requires a B.S. degree in chemistry or the equivalent in appropriate and substantial college level study of chemistry plus experience.

Chemist I

General characteristics. This is the entry level of professional work requiring a bachelor's degree in chemistry

^{2 &}quot;Development level" personnel program—either:

⁽a) Director of personnel servicing an entire company (with or without subordinate establishments) where the personnel director plays an important role in establishment of basic personnel policies, plans, objectives, etc., for the company subject to policy direction and control from company officers, or (b) director of personnel servicing an intermediate organization below the company level, e.g., a division or a subsidiary, to which a relatively complete delegation of personnel program planning and development responsibility is made. In this situation only basic policy direction is given by the parent company and local officers. The director of personnel has essentially the same degree of latitude and responsibility for establishment of basic personnel policies, plans, objectives, etc., as described above in (a).

³ "Type A" organization serviced—most jobs serviced do not present particularly difficult or unusual recruitment, job evaluation, or training problems because the jobs consist of relatively easy-to-understand work processes, and an adequate labor supply is available. These conditions are most likely to be found in organizations in which the work force and organizational structure are relatively stable.

^{4 &}quot;Type B" organization serviced—a substantial number of jobs present difficult recruitment, job evaluation, or training problems because of the jobs: Consist of hard-to-understand work processes (e.g., professional, scientific, administrative, or technical); have hard-to-match skill requirements; are in new or emerging occupations; or are extremely hard to fill. These conditions are most likely to be found in organizations in which the work force, organizational structure, work processes or functions, etc., are complicated or unstable.

² Insufficient data were obtained for level V to warrant presentation of average salaries.

and no experience, or the equivalent (to a degree) in appropriate education and experience. Performs assignments designed to develop professional capabilities and to provide experience in the application of training in chemistry as it relates to the company's programs. May also receive formal classroom or seminar type training. (Terminal positions are excluded.)

Direction received. Works under close supervision. Receives specific and detailed instructions as to required tasks and results expected. Work is checked during progress, and is reviewed for accuracy upon completion.

Typical duties and responsibilities. Performs a variety of routine tasks that are planned to provide experience and familiarization with the chemistry staff, methods, practices, and programs of the company. The work includes a variety of routine qualitative and quantitative analyses; physical tests to determine properties such as viscosity, tensile strength, and melting point; and assisting more experienced chemists to gain additional knowledge through personal observation and discussion.

Responsibility for the direction of others. Usually none.

Chemist II

General characteristics. At this continuing developmental level, performs routine chemical work requiring selection and application of general and specialized methods, techniques, and instruments commonly used in the laboratory and the ability to carry out instructions when less common or proposed methods or procedures are necessary. Requires work experience acquired in an entry level position, or appropriate graduate level study. For training and developmental purposes, assignments may include some work that is typical of a higher level. (Terminal positions are excluded.)

Direction received. Supervisor establishes the nature and extent of analysis required, specifies methods and criteria on new types of assignments, and reviews work for thoroughness of application of methods and accuracy of results.

Typical duties and responsibilities. Carries out a wide variety of standardized methods, tests, and procedures. In accordance with specific instructions may carry out proposed and less common ones. Is expected to detect problems in using standardized procedures because of the condition of the sample, difficulties with the equipment, etc. Recommends modifications of pro-

cedures, e.g., extending or curtailing the analysis or using alternate procedures, based on his knowledge of the problem and pertinent available literature. Conducts specified phases of research projects as an assistant to an experienced chemist.

Responsibility for the direction of others. May be assisted by a few aids or technicians.

Chemist III

General characteristics. Performs a broad range of chemical tests and procedures utilized in the laboratory, using judgment in the independent evaluation, selection, and adaptation of standard methods and techniques. May carry through a complete series of tests on a product in its different process stages. Some assignments require a specialized knowledge of one or two common categories of related substances. Performance at this level requires developmental experience in a professional position, or equivalent graduate level education.

Direction received. On routine work, supervision is very general. Assistance is furnished on unusual problems and work is reviewed for application of sound professional judgment.

Typical duties and responsibilities. In accordance with instructions as to the nature of the problem, selects standard methods, tests or procedures; when necessary, develops or works out alternate or modified methods with supervisor's concurrence. Assists in research by analyzing samples or testing new procedures that require specialized training because (a) standard methods are inapplicable, (b) analytical findings must be interpreted in terms of compliance or noncompliance with standards, or (c) specialized and advanced equipment and techniques must be adapted.

Responsibility for the direction of others. May supervise or coordinate the work of a few technicians or aids, and be assisted by lower level chemists.

Chemist IV

General characteristics. As a fully competent chemist in all conventional aspects of the subject matter or the functional area of the assignments, plans and conducts work requiring (a) mastery of specialized techniques or ingenuity in selecting and evaluating approaches to unforeseen or novel problems, and (b) ability to apply a research approach to the solution of a wide variety of

problems and to assimilate the details and significance of chemical and physical analyses, procedures, and tests. Requires sufficient professional experience to assure competence as a fully trained worker; or, for positions primarily of a research nature, completion of all requirements for a doctoral degree may be substituted for experience.

Direction received. Independently performs most assignments with instructions as to the general results expected. Receives technical guidance on unusual or complex problems and supervisory approval on proposed plans for projects.

Typical duties and responsibilities. Conducts laboratory assignments requiring the determination and evaluation of alternative procedures and the sequence of performing them. Performs complex, exacting, unusual analytical assignments requiring specialized knowledge of techniques or products. Interprets results, prepares reports, and may provide technical advice in his specialized area.

Responsibility for the direction of others. May supervise a small staff of chemists and technicians.

Chemist V

General characteristics. Participates in planning laboratory programs on the basis of specialized knowledge of problems and methods and probable value of results. May serve as an expert in a narrow specialty (e.g., class of chemical compounds, or a class of products), making recommendations and conclusions which serve as the basis for undertaking or rejecting important projects. Development of the knowledge and expertise required for this level of work usually reflects progressive experience through chemist IV.

Direction received. Supervision and guidance relates largely to overall objectives, critical issues, new concepts, and policy matters. Consults with supervisor concerning unusual problems and developments.

Typical duties and responsibilities. One or both of the following: (1) In a supervisory capacity, plans, organizes, and directs assigned laboratory programs. Independently defines scope and critical elements of the projects and selects approaches to be taken. A substantial portion of the work supervised is comparable to that described for chemist IV. (2) As individual researcher or worker, carries out projects requiring development of new or

highly modified scientific techniques and procedures, extensive knowledge of his specialty, and knowledge of related scientific fields.

Responsibility for the direction of others. Supervises, coordinates, and reviews the work of a small staff of chemists and technicians engaged in varied research and development projects, or a larger group performing routine analytical work. Estimates manpower needs and schedules and assigns work to meet completion date. Or, as individual researcher or worker, may be assisted on projects by other chemists or technicians.

Chemist VI

General characteristics. Performs work requiring leadership and expert knowledge in a specialized field, product, or process. Formulates and conducts a systematic attack on a problem area of considerable scope and complexity which must be approached through a series of complete and conceptually related studies, or a number of projects of lesser scope. The problems are complex because they are difficult to define and require unconventional or novel approaches or have other difficult features. Maintains liaison with individuals and units within and outside his organization, with responsibility for acting independently on technical matters pertaining to his field. Work at this level usually requires extensive progressive experience including work comparable to chemist V.

Direction received. Supervision received is essentially administrative, with assignments given in terms of broad general objectives and limits.

Typical duties and responsibilities. One or both of the following: (1) In a supervisory capacity (a) plans, develops, coordinates, and directs a number of large and important projects or a project of major scope and importance, or (b) is responsible for the entire chemical program of a company, when the program is of limited complexity and scope. Activities under his leadership are of such a scope that they require a few (3 to 5) subordinate supervisors or team leaders with at least one in a position comparable to level V. (2) As individual researcher or worker determines, conceives, plans, and conducts projects of major importance to the company. Applies a high degree of originality and ingenuity in adapting, extending, and synthesizing existing theory, principles, and techniques into original combinations and configurations. May serve as a consultant to other chemists in his specialty.

Responsibility for the direction of others. Plans, organizes, and supervises the work of a staff of chemists and technicians. Evaluates progress of the staff and results obtained, and recommends major changes to achieve overall objectives. Or, as individual worker or researcher, may be assisted on individual projects by other chemists or technicians.

Chemist VII

General characteristics. Makes decisions and recommendations that are recognized as authoritative and have an important impact on extensive chemical activities. Initiates and maintains extensive contacts with key chemists and officials of other organizations and companies, requiring skill in persuasion and negotiation of critical issues. At this level individuals will have demonstrated creativity, foresight, and mature judgment in anticipating and solving unprecedented chemical problems, determining program objectives and requirements, organizing programs and projects, and developing standards and guides for diverse chemical activities.

Direction received. Receives general administrative direction.

Typical duties and responsibilities. One or both of the following: (1) In a supervisory capacity is responsible for (a) an important segment of a chemical program of a company with extensive and diversified scientific requirements, or (b) the entire chemical program of a company where the program is more limited in scope. The overall chemical program contains critical problems the solution of which requires major technological advances and opens the way for extensive related development. Makes authoritative technical recommendations concerning the scientific objectives and levels of work which will be most profitable in light of company requirements and scientific and industrial trends and developments. Recommends facilities, personnel, and funds required. (2) As individual researcher and consultant, selects problems for research to further the company's objectives. Conceives and plans investigations in which the phenomena and principles are not adequately understood, and where few or contradictory scientific precedents or results are available for reference. Outstanding creativity and mature judgment are required to devise hypotheses and techniques of experimentation and to interpret results. As a leader and authority in his company, in a broad area of specialization, or in a narrow but intensely specialized one, advises the head of a large laboratory or company officials on

complex aspects of extremely broad and important programs. Has responsibility for exploring, evaluating, and justifying proposed and current programs and projects and furnishing advice on unusually complex and novel problems in the specialty field. Typically will have contributed innovations (e.g., techniques, products, procedures) which are regarded as significant advances in the field.

Responsibility for the direction of others. Directs several subordinate supervisors or team leaders, some of whom are in positions comparable to chemist VI; or, as individual researcher and consultant, may be assisted on individual projects by other chemists and technicians.

Chemist VIII

General characteristics. Makes decisions and recommendations that are authoritative and have a far-reaching impact on extensive chemical and related activities of the company. Negotiates critical and controversial issues with top level chemists and officers of other organizations and companies. Individuals at this level have demonstrated a high degree of creativity, foresight, and mature judgment in planning, organizing, and guiding extensive chemical programs and activities of outstanding novelty and importance.

Direction received. Receives general administrative direction.

Typical duties and responsibilities. One or both of the following: (1) In a supervisory capacity is responsible for (a) the entire chemical program of a company which is of moderate scope, or (b) an important segment of a chemical program of a company with very extensive and highly diversified scientific requirements, where programs are of such complexity and scope that they are of critical importance to overall operations and include problems of extraordinary difficulty that have resisted solution. Decides the kind and extent of chemical programs needed to accomplish the objectives of the company, for choosing the scientific approaches, for planning and organizing facilities and programs, and for interpreting results. (2) As individual researcher and consultant formulates and guides the attack on problems of exceptional difficulty and marked importance to the company and/or industry. Problems are characterized by the lack of scientific precedents and source materials, or the lack of success of prior research and analysis so that their solution would represent an advance of great significance and importance. Performs advisory and

consulting work for the company as a recognized authority for broad program areas of considerable novelty and importance. Has made contributions such as new products or techniques, development of processes, etc., which are regarded as major advances in the field.

Responsibility for the direction of others. Supervises several subordinate supervisors or team leaders some of whose positions are comparable to chemist VII, or individual researchers some of whose positions are comparable to chemist VII and sometimes chemist VIII. As an individual researcher and consultant may be assisted on individual projects by other chemists or technicians.

NOTE: Individuals in charge of a company's chemical program may match any of several of the survey job levels, depending on the size and complexity of chemical programs. Excluded from level VIII are chemists in charge of programs so extensive and complex (e.g., consisting of highly diversified or unusually novel products and procedures) that one or more subordinate supervisory chemists are performing at level VIII. Also excluded from level VIII are individual researchers and consultants who are recognized as national and/or international authorities and scientific leaders in very broad areas of scientific interest and investigation.

ENGINEER

Performs professional work in research, development, design, testing, analysis, production, construction, maintenance, operation, planning, survey, estimating, application, or standardization of engineering facilities, systems, structures, processes, equipment devices, or materials requiring knowledge of the science and art by which materials, natural resources, and power are made useful. Work typically requires a B.S. degree in engineering or the equivalent in combined education and experience. (Excluded are: Safety engineers, industrial engineers, quality control engineers, sales engineers, and engineers whose primary responsibility is to be in charge of nonprofessional maintenance work.)

Engineer I

General characteristics. This is the entry level of professional work requiring a bachelor's degree in engineering and no experience, or the equivalent (to a degree) in appropriate education and experience. Performs assignments designed to develop professional work knowledges

and abilities. May also receive formal classroom or seminar type training. (Terminal positions are excluded.)

Direction received. Works under close supervision. Receives specific and detailed instructions as to required tasks and results expected. Work is checked during progress and is reviewed for accuracy upon completion.

Typical duties and responsibilities. Performs a variety of routine tasks that are planned to provide experience and familiarization with the engineering staff, methods, practices, and programs of the company.

Responsibility for the direction of others. Usually none.

Engineer II

General characteristics. At this continuing developmental level, performs routine engineering work requiring application of standard techniques, procedures, and criteria in carrying out a sequence of related engineering tasks. Limited exercise of judgment is required on details of work and in making preliminary selections and adaptations of engineering alternatives. Requires work experience acquired in an entry level position, or appropriate graduate level study. For training and developmental purposes, assignments may include some work that is typical of a higher level. (Terminal positions are excluded.)

Direction received. Supervisor screens assignments for unusual or difficult problems and selects techniques and procedures to be applied on nonroutine work. Receives close supervision on new aspects of assignments.

Typical duties and responsibilities. Using prescribed methods, performs specific and limited portions of a broader assignment of an experienced engineer. Applies standard practices and techniques in specific situations, adjusts and correlates data, recognizes discrepancies in results, and follows operations through a series of related detailed steps or processes.

Responsibility for the direction of others. May be assisted by a few aids or technicians.

Engineer III

General characteristics. Independently evaluates, selects, and applies standard engineering techniques, procedures, and criteria, using judgment in making minor adaptations and modifications. Assignments have clear and

specified objectives and require the investigation of a limited number of variables. Performance at this level requires developmental experience in a professional position, or equivalent graduate level education.

Direction received. Receives instructions on specific assignment objectives, complex features, and possible solutions. Assistance is furnished on unusual problems and work is reviewed for application of sound professional judgment.

Typical duties and responsibilities. Performs work which involves conventional types of plans, investigations, surveys, structures, or equipment with relatively few complex features for which there are precedents. Assignments usually include one or more of the following: Equipment design and development, test of materials, preparation of specifications, process study, research investigations, report preparation, and other activities of limited scope requiring knowledge of principles and techniques commonly employed in the specific narrow area of assignments.

Responsibility for the direction of others. May supervise or coordinate the work of drafters, technicians, and others who assist in specific assignments.

Engineer IV

General characteristics. As a fully competent engineer in all conventional aspects of the subject matter or the functional area of the assignments, plans and conducts work requiring judgment in the independent evaluation, selection, and substantial adaptation and modification of standard techniques, procedures, and criteria. Devises new approaches to problems encountered. Requires sufficient professional experience to assure competence as a fully trained worker; or, for positions primarily of a research nature, completion of all requirements for a doctoral degree may be substituted for experience.

Direction received. Independently performs most assignments with instructions as to the general results expected. Receives technical guidance on unusual or complex problems and supervisory approval on proposed plans for projects.

Typical duties and responsibilities. Plans, schedules, conducts, or coordinates detailed phases of the engineering work in a part of a major project or in a total project of moderate scope. Performs work which involves conventional engineering practice but may include a variety of complex features such as conflicting design

requirements, unsuitability of standard materials, and difficult coordination requirements. Work requires a broad knowledge of precedents in the specialty area and a good knowledge of principles and practices of related specialties.

Responsibility for the direction of others. May supervise a few engineers or technicians on assigned work.

Engineer V

General characteristics. Applies intensive and diversified knowledge of engineering principles and practices in broad areas of assignments and related fields. Makes decisions independently on engineering problems and methods, and represents the organization in conferences to resolve important questions and to plan and coordinate work. Requires the use of advanced techniques and the modification and extension of theories, precepts, and practices of his field and related sciences and disciplines. The knowledge and expertise required for this level of work usually result from progressive experience, including work comparable to engineer IV.

Direction received. Supervision and guidance relate largely to overall objectives, critical issues, new concepts, and policy matters. Consults with supervisor concerning unusual problems and developments.

Typical duties and responsibilities. One or more of the following: (1) In a supervisory capacity plans, develops, coordinates, and directs a large and important engineering project or a number of small projects with many complex features. A substantial portion of the work supervised is comparable to that described for engineer IV. (2) As individual researcher or worker carries out complex or novel assignments requiring the development of new or improved techniques and procedures. Work is expected to result in the development of new or refined equipment, materials, processes, products, and/or scientific methods. (3) As staff specialist develops and evaluates plans and criteria for a variety of projects and activities to be carried out by others. Assesses the feasibility and soundness of proposed engineering evaluation tests, products, or equipment when necessary data are insufficient or confirmation by testing is advisable. Usually performs as a staff advisor and consultant as to a technical specialty, a type of facility or equipment, or a program function.

Responsibility for the direction of others. Supervises, coordinates, and reviews the work of a small staff of engineers and technicians; estimates manpower needs

and schedules and assigns work to meet completion date. Or, as individual research or staff specialist may be assisted on projects by other engineers or technicians.

Engineer VI

General characteristics. Has full technical responsibility for interpreting, organizing, executing, and coordinating assignments. Plans and develops engineering projects concerned with unique or controversial problems which have an important effect on major company programs. This involves exploration of subject area, definition of scope and selection of problems for investigation, and development of novel concepts and approaches. Maintains liaison with individuals and units within or outside his organization, with responsibility for acting independently on technical matters pertaining to his field. Work at this level usually requires extensive progressive experience including work comparable to engineer V.

Direction received. Supervision received is essentially administrative, with assignments given in terms of broad general objectives and limits.

Typical duties and responsibilities. One or more of the following: (1) In a supervisory capacity (a) plans, develops, coordinates, and directs a number of large and important projects or a project of major scope and importance, or (b) is responsible for the entire engineering program of a company when the program is of limited complexity and scope. The extent of his responsibilities generally requires a few (3 to 5) subordinate supervisors or team leaders with at least one in a position comparable to level V. (2) As individual researcher or worker conceives, plans, and conducts research in problem areas of considerable scope and complexity. The problems must be approached through a series of complete and conceptually related studies, are difficult to define, require unconventional or novel approaches, and require sophisticated research techniques. Available guides and precedents contain critical gaps, are only partially related to the problem, or may be largely lacking due to the novel character of the project. At this level, the individual researcher generally will have contributed inventions, new designs, or techniques which are of material significance in the solution of important problems. (3) As a staff specialist serves as the technical specialist for the organization (division or company) in the application of advanced theories, concepts, principles, and processes for an assigned area of responsibility (i.e., subject matter, function, type of facility or equipment, or product). Keeps abreast of new scientific methods and developments affecting his organization for the purpose of recommending changes in emphasis of programs or new programs warranted by such developments.

Responsibility for the direction of others. Plans, organizes, and supervises the work of a staff of engineers and technicians. Evaluates progress of the staff and results obtained, and recommends major changes to achieve overall objectives. Or, as individual researcher or staff specialist may be assisted on individual projects by other engineers or technicians.

Engineer VII

General characteristics. Makes decisions and recommendations that are recognized as authoritative and have an important impact on extensive engineering activities. Initiates and maintains extensive contacts with key engineers and officials of other organizations and companies, requiring skill in persuasion and negotiation of critical issues. At this level individuals will have demonstrated creativity, foresight, and mature engineering judgment in anticipating and solving unprecedented engineering problems, determining program objectives and requirements, organizing programs and projects, and developing standards and guides for diverse engineering activities.

Direction received. Receives general administrative direction.

Typical duties and responsibilities. One or both of the following: (1) In a supervisory capacity is responsible for (a) an important segment of the engineering program of a company with extensive and diversified engineering requirements, or (b) the entire engineering program of a company when it is more limited in scope. The overall engineering program contains critical problems the solution of which requires major technological advances and opens the way for extensive related development. The extent of his responsibilities generally requires several subordinate organizational segments or teams. Recommends facilities, personnel, and funds required to carry out programs which are directly related with and directed toward fulfillment of overall company objectives. (2) As individual researcher and consultant is a recognized leader and authority in his company in a broad area of specialization or in a narrow but intensely specialized field. Selects research problems to further the company's objectives. Conceives and plans investigations of broad areas of considerable novelty and importance for which engineering precedents are lacking in areas critical to the overall engineering program. Is consulted extensively by associates and others, with a high degree of reliance placed on his scientific interpretations and advice. Typically, will have contributed inventions, new designs, or techniques which are regarded as major advances in the field.

Responsibility for the direction of others. Directs several subordinate supervisors or team leaders, some of whom are in positions comparable to engineer VI; or, as individual researcher and consultant, may be assisted on individual projects by other engineers and technicians.

Engineer VIII

General characteristics. Makes decisions and recommendations that are recognized as authoritative and have a far-reaching impact on extensive engineering and related activities of the company. Negotiates critical and controversial issues with top level engineers and officers of other organizations and companies. Individuals at this level demonstrate a high degree of creativity, foresight and mature judgment in planning, organizing, and guiding extensive engineering programs and activities of outstanding novelty and importance.

Direction received. Receives general administrative direction.

Typical duties and responsibilities. One or both of the following: (1) In a supervisory capacity is responsible for (a) an important segment of a very extensive and highly diversified engineering program of a company, or (b) the entire engineering program of a company when the program is of moderate scope. The programs are of such complexity and scope that they are of critical importance to overall objectives, include problems of extraordinary difficulty that often have resisted

solution, and consist of several segments requiring subordinate supervisors. Is responsible for deciding the kind and extent of engineering and related programs needed to accomplish the objectives of the company, for choosing the scientific approaches, for planning and organizing facilities and programs, and for interpreting results. (2) As individual researcher and consultant formulates and guides the attack on problems of exceptional difficulty and marked importance to the company or industry. Problems are characterized by their lack of scientific precedents and source material, or lack of success of prior research and analysis so that their solution would represent an advance of great significance and importance. Performs advisory and consulting work for the company as a recognized authority for broad program areas or in an intensely specialized area of considerable novelty and importance.

Responsibility for the direction of others. Supervises several subordinate supervisors or team leaders some of whose positions are comparable to engineer VII, or individual researchers some of whose positions are comparable to engineer VII and sometimes engineer VIII. As an individual researcher and consultant may be assisted on individual projects by other engineers or technicians.

NOTE: Individuals in charge of a company's engineering program may match any of several of the survey job levels depending on the size and complexity of engineering programs. Excluded from level VIII are engineers in charge of programs so extensive and complex (e.g., consisting of research and development on a variety of complex products or systems with numerous novel components) that one or more subordinate supervisory engineers are performing at level VIII. Also excluded from level VIII are individual researchers and consultants who are recognized as national and/or international authorities and scientific leaders in very broad areas of scientific interest and investigation.

Technical Support

ENGINEERING TECHNICIAN

To be covered by these definitions, employees must meet all of the following criteria: (a) Provides semiprofessional technical support for engineers working in such areas as research, design, development, testing, or manufacturing process improvement. (2) Work pertains to electrical, electronic, or mechanical components or equipment. (3) Required to have some knowledge of

science or engineering. (Excludes production or maintenance workers, quality control testers, craft workers, drafters, designers, and engineers.)

Engineering Technician I

Performs simple routine tasks under close supervision or from detailed procedures. Work is checked in process

or on completion. Performs, at this level, one or a combination of such typical duties as:

Assembles or installs equipment or parts requiring simple wiring, soldering, or connecting.

Performs simple or routine tasks or tests such as tensile or hardness tests; operates and adjusts simple test equipment; records test data.

Gathers and maintains specified records of engineering data such as tests, drawings, etc.; performs computations by substituting numbers in specified formulas; plots data and draws simple curves and graphs.

Engineering Technician II

Performs standardized or prescribed assignments, involving a sequence of related operations. Follows standard work methods or explicit instructions; technical adequacy of routine work is reviewed on completion; nonroutine work may also be reviewed in process. Performs, at this level, one or a combination of such typical duties as:

Assembles or constructs simple or standard equipment or parts. May service or repair simple instruments or equipment.

Conducts a variety of standardized tests; may prepare test specimens; sets up and operates standard test equipment; records test data.

Extracts engineering data from various prescribed sources; processes the data following well-defined methods; presents the data in prescribed form.

Engineering Technician III

Performs assignments that are not completely standardized or prescribed. Selects or adapts standard procedures or equipment. Receives initial instructions, equipment requirements, and advice from supervisor or engineer; technical adequacy of completed work is checked. Performs, at this level, one or a combination of such typical duties as:

Constructs components, subunits, or simple models or adapts standard equipment. May troubleshoot and correct malfunctions.

Conducts various tests or experiments which may require minor modifications in test setups or procedures; selects, sets up, and operates standard test equipment and records test data.

Extracts and compiles a variety of engineering data; processes or computes data using specified formulas and procedures. Performs routine analysis to check applicability, accuracy, and reasonableness of data.

Engineering Technician IV

Performs nonroutine assignments of substantial variety and complexity. Receives objectives and tech-

nical advice from supervisor or engineer; work is reviewed for technical adequacy. May be assisted by lower level technicians. Performs, at this level, one or a combination of such typical duties as:

Works on limited segment of development project; constructs experimental or prototype models to meet engineering requirements; conducts tests or experiments; records and evaluates data and reports findings.

Conducts tests or experiments requiring selection and adaptation or modification of test equipment and test procedures; records data; analyzes data and prepares test reports.

Compiles and computes a variety of engineering data; may analyze test and design data; develops or prepares schematics, designs, specifications, parts lists, or makes recommendations regarding these items. May review designs or specifications for adequacy.

Engineering Technician V

Performs nonroutine and complex assignments involving responsibility for planning and conducting a complete project of relatively limited scope or a portion of a larger and more diverse project. Selects and adapts plans, techniques, designs, or layouts. May coordinate portions of overall assignment; reviews, analyzes, and integrates the technical work of others. Supervisor or professional engineer outlines objectives, requirements, and design approaches; completed work is reviewed for technical adequacy and satisfaction of requirements. May be assisted by lower level technicians. Performs, at this level, one or a combination of such typical duties as:

Designs, develops, and constructs major units, devices, or equipment; conducts tests or experiments; analyzes results and redesigns or modifies equipment to improve performance; reports results.

Plans or assists in planning tests to evaluate equipment performance. Determines test requirements, equipment modification and test procedures; conducts tests, analyzes and evaluates data, and prepares reports on findings and recommendations.

Reviews and analyzes a variety of engineering data to determine requirements to meet engineering objectives; may calculate design data; prepares layouts, detailed specifications, parts lists, estimates, procedures, etc. May check and analyze drawings or equipment to determine adequacy of drawings and design.

DRAFTERS

Drafter-tracer

Copies plans and drawings prepared by others by placing tracing cloth or paper over drawings and tracing with pen or pencil. (Does not include tracing limited to plans primarily consisting of straight lines and a large scale not requiring close delineation.)

and/or

Prepares simple or repetitive drawings of easily visualized items. Work is closely supervised during progress.

Drafter I

Prepares detail drawings of single units or parts for engineering, construction, manufacturing, or repair purposes. Types of drawings prepared include isometric projections (depicting three dimensions in accurate scale) and sectional views to clarify positioning or components and convey needed information. Consolidates details from a number of sources and adjusts or transposes scale as required. Suggested methods of approach, applicable precedents, and advice on source materials are given with initial assignments. Instructions are less complete when assignments recur. Work may be spot checked during progress.

Drafter II

Performs nonroutine and complex drafting assignments that require the application of most of the standardized drawing techniques regularly used. Duties typically involve such work as: Prepares working

drawings of subassemblies with irregular shapes, multiple functions, and precise positional relationships between components; prepares architectural drawings for construction of a building including detail drawings of foundations, wall sections, floor plans, and roof. Uses accepted formulas and manuals in making necessary computations to determine quantities of materials to be used, load capacities, strengths, stresses, etc. Receives initial instructions, requirements, and advice from supervisor. Completed work is checked for technical adequacy.

Drafter III

Plans the graphic presentation of complex items having distinctive design features that differ significantly from established drafting precedents. Works in close support with the design originator, and may recommend minor design changes. Analyzes the effect of each change on the details of form, function, and positional relationships of components and parts. Works with a minimum of supervisory assistance. Completed work is reviewed by design originator for consistency with prior engineering determinations. May either prepare drawings, or direct their preparation by lower level drafters.

Clerical Supervisory

KEYPUNCH SUPERVISOR

Supervises three or more keypunch operators who keypunch or verify cards or tape for computer or tabulating machine processing. May also, as an incidental responsibility, supervise the operation of other types of punching machines such as reproducers or gang punches.

Excluded are: (a) Positions also responsible for supervising the operation of equipment such as computers, tabulating machines, or other kinds of office machines; (b) positions responsible for supervising

clerical work not directly related to the keypunch function; and (c) working supervisors, group leaders, or other overseers with more limited supervisory responsibility than is described below.

Keypunch supervisory positions are classified in five levels (I through V) on the basis of combinations of three elements—level and kind of supervisory responsibility, difficulty of keypunch work supervised, and number of employees supervised. In table C-4 two levels of supervision are described and each is followed by a brief chart that shows the level of keypunch supervisor for each combination of the other two elements.

Table C-4. Criteria for matching keypunch supervisors by level

Level and kind of supervisory responsibility

Is responsible for the day-to-day operations and flow of work when the organization of the work, assignment of employees to positions, the job types and levels, instructions and procedures, etc., are prescribed by higher authority. Within this prescribed framework, assigns work to individual employees; instructs employees in specific tasks and procedures; insures work meets established standards of quality; checks attendance; keeps production records; provides information to higher levels for use in budgeting, planning of personnel changes, adjusting to variations in the workload, etc.; reports problems to a higher level supervisor. (Exclude positions in which keypunching rather than supervisory responsibility is the most significant function.)

Lower

In addition to being responsible for the functions of the lower level of supervisory responsibility, plans and establishes the organization and flow of work; plans changes to meet both short- and long-term workload trends and changes; selects employees and assigns them to positions; assigns and reviews work of subordinates; initiates recommendations or formal actions such as requests for staff, job evaluation actions, promotions, etc.; approves absences and vacation schedules; recommends disciplinary actions; in some positions, assists programmers, project planners, or other technical specialists in designing card layouts and detailed punching instructions.

Upper

Number of employees	Difficulty of ke super	• • • • • • • • • • • • • • • • • • • •	Difficulty of keypunch work supervised				
supervised	Less difficult 1	More difficult ²	Less difficult ¹	More difficult ²			
	Level of keypunch supervisor		Level of keypunch supervisor				
3-15	=======================================	II III IV	 	III IV V			

¹ Less difficult keypunch work - Work is routine and repetitive. Under close supervision or following specific procedures or instructions, works from various standardized source documents which have been coded, follows specified procedures which have been prescribed in detail and require little or no selecting, coding, or interpreting of data to be recorded. Refers to supervisor problems arising from erroneous items, codes, or missing information. (This level is the same as the BLS Class B Keypunch Operator.)

NOTE: If the keypunch activities include both "more difficult" and "less difficult" work, classification should be on the basis of the more difficult work, provided that a significant proportion of the keypunch operators work at this level. The number of keypunch operators performing more difficult work is considered significant when at least 25 percent of the operators work at this level, provided there are at least two such operators in units with a total of 3 or 4 employees, 3 such operators in units with a total of 5 to 12 employees, and 4 such operators in units with a total of 13 or more operators.

Clerical

CLERK, ACCOUNTING

Performs one or more accounting clerical tasks such as posting to registers and ledgers; reconciling bank accounts; verifying the internal consistency, completeness, and mathematical accuracy of accounting documents; assigning prescribed accounting distribution codes; examining and verifying for clerical accuracy various types of reports, lists, calculations, postings, etc.; or preparing simple (or assisting in preparing more

complicated) journal vouchers. May work in either a manual or automated accounting system.

The work requires a knowledge of clerical methods and office practices and procedures which relates to the clerical processing and recording of transactions and accounting information. With experience, the worker typically becomes familiar with the bookkeeping and accounting terms and procedures used in the assigned work, but is not required to have a knowledge of the formal principles of bookkeeping and accounting.

² More difficult keypunch work - Work requires the application of experience and judgment in selecting procedures to be followed and in searching for, interpreting, selecting, or coding items to be keypunched from a variety of documents. On occasion may also perform some routine keypunch work. May train inexperienced keypunch operators. (This level is the same as the BLS Class A Keypunch Operator.)

Positions are classified into levels on the basis of the following definitions.

Clerk, Accounting I

Under close supervision, following detailed instructions and standardized procedures, performs one or more routine accounting clerical operations, such as posting to ledgers, cards, or worksheets where identification of items and locations of postings are clearly indicated; checking accuracy and completeness of standardized and repetitive records or accounting documents; and coding documents using a few prescribed accounting codes.

Clerk, Accounting II

Under general supervision, performs accounting clerical operations which require the application of experience and judgment, for example, clerically processing complicated or nonrepetitive accounting transactions, selecting among a substantial variety of prescribed accounting codes and classifications, or tracing transactions through previous accounting actions to determine source of discrepancies. May be assisted by one or more accounting clerks I.

CLERK, FILE

Files, classifies, and retrieves material in an established filing system. May perform clerical and manual tasks required to maintain files. Positions are classified into levels on the basis of the following definitions.

Clerk, File I

Performs routine filing of material that has already been classified or which is easily classified in a simple serial classification system (e.g., alphabetical, chronological, or numerical). As requested, locates readily available material in files and forwards material; may fill out withdrawal charge. May perform simple clerical and manual tasks required to maintain and service files.

Clerk, File II

Sorts, codes, and files unclassified material by simple (subject matter) headings or partly classified material by finer subheadings. Prepares simple related index and cross-reference aids. As requested, locates clearly identified material in files and forwards material. May perform related clerical tasks required to maintain and service files.

Clerk, File III

Classifies and indexes file material such as correspondence, reports, technical documents, etc., in an established filing system containing a number of varied subject matter files. May also file this material. May keep records of various types in conjunction with the files. May lead a small group of lower level file clerks.

KEYPUNCH OPERATOR

Operates a keypunch machine to record or verify alphabetic and/or numeric data on tabulating cards or on tape.

Positions are classified into levels on the basis of the following definitions.

Keypunch Operator I

Work is routine and repetitive. Under close supervision or following specific procedures or instructions, works from various standardized source documents which have been coded, and follows specified procedures which have been prescribed in detail and require little or no selecting, coding, or interpreting of data to be recorded. Refers to supervisor problems arising from erroneous items, codes, or missing information.

Keypunch Operator II

Work requires the application of experience and judgment in selecting procedures to be followed and in searching for, interpreting, selecting, or coding items to be keypunched from a variety of source documents. On occasion may also perform some routine keypunch work. May train inexperienced keypunch operators.

MESSENGER

Performs various routine duties such as running errands, operating minor office machines such as sealers or mailers, opening and distributing mail, and other minor clerical work. *Exclude* positions that require operation of a motor vehicle as a significant duty.

STENOGRAPHER

Primary duty is to take dictation using shorthand, and to transcribe the dictation. May also type from written copy. May operate from a stenographic pool. May occasionally transcribe from voice recordings.

NOTE: This job is distinguished from that of a secretary in that a secretary normally works in a confidential relationship with only one manager or executive and performs more responsible and discretionary tasks.

Stenographer, General

Dictation involves a normal routine vocabulary. May maintain files, keep simple records, or perform other relatively routine clerical tasks.

Stenographer, Senior

Dictation involves a varied technical or specialized vocabulary such as in legal briefs or reports on scientific research. May also set up and maintain files, keep records, etc.

OR

Performs stenographic duties requiring significantly greater independence and responsibility than stenographer, general, as evidenced by the following: Work requires a high degree of stenographic speed and accuracy; a thorough working knowledge of general business and office procedure and of the specific business operations, organization, policies, procedures, files, workflow, etc. Uses this knowledge in performing stenographic duties and responsible clerical tasks such as maintaining follow-up files; assembling material for reports, memorandums, and letters; composing simple

letters from general instructions; reading and routing incoming mail; answering routine questions, etc.

TYPIST

Uses a typewriter to make copies of various materials or to make out bills after calculations have been made by another person. May include typing of stencils, mats, or similar materials for use in duplicating processes. May do clerical work involving little special training, such as keeping simple records, filing records and reports, or sorting and distributing incoming mail.

Typist l

Performs one or more of the following: Copy typing from rough or clear drafts; or routine typing of forms, insurance policies, etc.; or setting up simple standard tabulations; or copying more complex tables already set up and spaced properly.

Typist II

Performs one or more of the following: Typing material in final form when it involves combining material from several sources; or responsibility for correct spelling, syllabication, punctuation, etc., of technical or unusual words or foreign language material; or planning layout and typing of complicated statistical tables to maintain uniformity and balance in spacing. May type routine form letters, varying details to suit circumstances.

NOTE: The occupational titles and definitions for drafter-tracers, messengers, and stenographers are the same as those used in the Bureau's program of occupational wage surveys in metropolitan areas. The occupations listed below have the same definition in both the national and area surveys; however, the level designations differ as shown:

Occupation	National Survey of Professional, Admini- strative, Technical, and Clerical Pay	Occupational Wage Surveys in Metropolitan Areas
Drafter	 	С В А
Clerk, accounting	I II	В А
Clerk, file	 	C B A
Keypunch operator	I II	В А
Typist	l il	B A

Appendix D. Comparison of Average Annual Salaries in Private Industry with Corresponding Salary Rates for Federal Employees Under the General Schedule, March 1975

The survey was designed to provide a basis for comparing salaries under the General Schedule classification and pay system with salaries in private enterprise. To assure collection of pay data for work levels equivalent to the General Schedule grade levels, the Civil Service Commission, in cooperation with the Bureau of

Labor Statistics, prepared the occupational work level definitions used in the survey. Definitions were graded by the Commission according to standards established for each grade level. Table D-1 shows the surveyed jobs grouped by work levels equivalent to General Schedule grade levels.

Table D-1. Comparison of average annual salaries in private industry with salary rates for Federal employees under the General Schedule, March 1975

	Average annual			Salary	rates fo	r Federa	l employ	ees under	the Gen	eral Sche	dule,		
Occupation and level surveyed by BLS ¹	salaries	01-4	Average ⁵				Ann	ual rates	and ste	ря ⁶			
5w2.0,00 0, 2=0	in private industry ²	Grade.	Average-	1	2	3	4	5	6	7	8	9	10
Clerks, file I	\$5, 524 6, 214	GS-1	\$5,409	\$5,294	\$5,470	\$5,646	\$5,822	\$ 5, 998	\$6, 174	\$6,350	\$6,526	\$6,702	\$6,878
Clerks, file II Keypunch operators I Typists I	6, 244 7, 114 6, 365	GS -2	6, 170	5, 996	6, 196	6, 396	6, 596	6,796	6,996	7,196	7, 396	7,596	7,796
Clerks, accounting I Clerks, file III Drafter-tracers Engineering technicians I Keypunch operators II Keypunch supervisors I Stenographers, general Typists II	7, 141 7, 683 7, 674 8, 625 8, 193 9, 187 7, 801 7, 452	·GS -3	7,247	6, 764	6, 989	7,214	7, 439	7, 664	7,889	8, 114	8, 339	8, 564	8,789
Clerks, accounting II	8, 982 8, 988 9, 970 10, 595 8, 784	GS-4	8, 476	7, 596	7,849	8, 102	8, 355	8,608	8,861	9, 114	9, 367	9, 620	9, 873
Accountants I Auditors I Buyers I Chemists I Drafters II Engineers I Engineering technicians III Keypunch supervisors III	10, 891 11, 296 10, 861 11, 801 11, 217 12, 917 11, 397 11, 971	GS-5	9, 649	8,500	8, 783	9, 066	9, 349	9,632	9, 915	10, 198	10, 481	10, 764	11,047
Keypunch supervisors IV7	14, 310	GS-6	10, 919	9, 473	9, 789	10, 105	10, 421	10, 737	11,053	11,369	11,685	12, 001	12, 317
Accountants II ——————————————————————————————————	12, 785 12, 587 13, 337 13, 288 14, 289 14, 197 13, 101 12, 543	GS -7	11,809	10, 520	10,871	11, 222	11, 573	11, 924	12, 275	12, 626	12, 977	13, 328	13, 679
Accountants III Attorneys I Auditors III Buyers III Chemists III Engineers III Engineering technicians V Job analysts III ⁷	15, 220 15, 334 15, 995 15, 572 16, 330	GS-9	14, 370	12,841	13, 269	13, 697	14, 125	14, 553	14, 981	15, 409	15, 837	16, 265	16, 693
Accountants IV Attorneys II Auditors IV Buyers IV Chemists IV Chief accountants I Directors of personnel I Engineers IV Job analysts IV 7	19, 204 19, 289 16, 809	GS-11	17, 447	15, 481	15, 997	16, 513	17, 029	17, 545	18,061	18, 577	19, 093	19, 609	20, 125

See footnotes at end of table.

Table D-1. Comparison of average annual salaries in private industry with salary rates for Federal employees under the General Schedule, March 1975-Continued

0	Average annual		Salary rates for Federal employees under the General Schedule ³											
Occupation and level surveyed by BLS ¹	salaries in private	Grade ⁴	Average ⁵	Annual rates and steps 6										
	industry ²		Linge	1	2	3	4	5	6	7	8	9	10	
Accountants V Attorneys III	\$21,664 22,558 22,700 21,323 19,938 22,427	GS-12	\$20,755	\$18,463	\$19,078	\$19,693	\$20,308	\$20,923	\$21,538	\$22, 153	\$22,768	\$23,383	\$23,998	
Attorneys IV ———————————————————————————————————	28, 159 26, 729 26, 226 25, 033 26, 109	GS-13	24,660	21,816	22,543	23,270	23,997	24,724	25,451	26, 178	26,905	27,632	28,359	
Attorneys V————————————————————————————————————	34,040 31,362 32,094 31,841 29,101	GS-14	28, 977	25,581	26,434	27, 287	28,140	28, 993	29, 846.	30,699	31,552	32,405	33,258	
Attorneys VI————————————————————————————————————	41,046 37,855 39,843 34,114	G\$-15	33,847	29,818	30,812	31,806	32,800	33, 794	34,788	35,782	⁸ 36, 776	⁸ 37,770	⁸ 38,764	

able level of competence as defined by the head of the agency. For employees who meet this condition, the service requirements are 52 calendar weeks each for advancement to salary rates 2, 3, and 4; 104 weeks each for advancement to salary rates 5, 6, and 7; and 156 weeks each for advancement to salary rates 8, 9, and 10. Section 5336 provides that an additional within-grade increase may be granted within any period of 52 weeks in recognition of high quality performance above that ordinarily found in the type of position concerned.

7 Not used in the 1975 Federal-private pay comparisons.

8 The rate of basic pay for employees at these rates is limited by section 5308 of title 5 of the United States Code to the rate for level V of the Executive Schedule. In March 1975, the annual rate for level V was \$36,000.

Under Section 5303 of title 5 of the United States Code, higher minimum rates (but not exceeding the maximum salary rate prescribed in the General Schedule for the grade or level) and a corresponding new salary range may be established for positions or occupations under certain conditions. The conditions include a finding that the Government's recruitment or retention of well-qualified persons is significantly handicapped because the salary rates in private industry are substantially above the salary rates of the statutory pay achedules. As of March 1975, special, higher salary ranges were authorized for professional engineers, accountants, and auditors at the entry grades (GS-5 and GS-7). Information on special salary rates, including the occupations and the areas to which they apply, may be obtained from the U.S. Civil Service Commission, Washington, D.C. 20415, or its regional offices.

¹ For definitions, see appendix C.
2 Survey findings as summarized in table 1 of this bulletin. For scope of survey, see appendix A.
3 Salary rates in effect March 1975, reference date of the BLS survey, as established by Executive Order 11811 issued under authority of Section 5305 of title 5, U.S. Code.
4 Corresponding grades in the General Schedule were supplied by the U.S. Civil Service Commission.
5 Mean salary of all General Schedule employees in each grade as of March 31, 1975, Not limited to Federal employees in occupations surveyed by BLS.
6 Section 5335 of title 5 of the U.S. Code provides for within-

surveyed by BLS.

Section 5335 of title 5 of the U.S. Code provides for withingrade increases on condition that the employee's work is of an accept-

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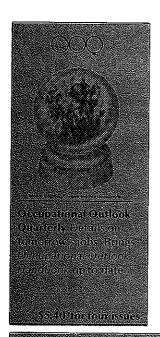
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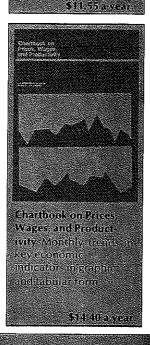


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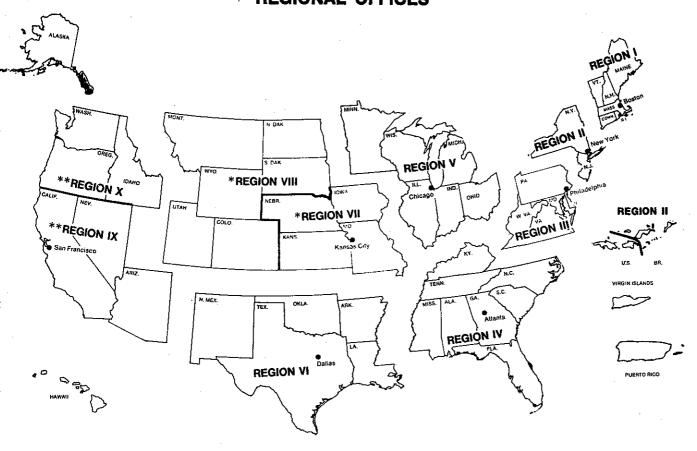






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