UNITED STATES DEPARTMENT OF LABOR
Frances Perkins, *Secretary*

BUREAU OF LABOR STATISTICS
Isador Lubin, *Commissioner* (on leave)
A. F. Hinrichs, *Acting Commissioner*

✦

Earnings in Aircraft-Parts Plants, November 1942

Prepared in the
DIVISION OF WAGE ANALYSIS
ROBERT J. MYERS, *Chief*

Bulletin No. 744

[Reprinted from the Monthly Labor Review, June 1943]

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1943

For sale by the Superintendent of Documents, U. S. Government Printing Office
Washington, D. C. - Price 5 cents

LETTER OF TRANSMITTAL

UNITED STATES DEPARTMENT OF LABOR,
BUREAU OF LABOR STATISTICS,
Washington, June 18, 1943.

The SECRETRAY OF LABOR:

I have the honor to transmit herewith a report on earnings in the aircraft-parts plants, November 1942, by Edith M. Olsen, under the supervision of H. M. Douty, of the Bureau's Division of Wage Analysis, Robert J. Myers, Chief.

A. F. HINRICHS, *Acting Commissioner.*

Hon. FRANCES PERKINS,
Secretary of Labor.

CONTENTS

Bulletin No. 307 of the

United States Bureau of Labor Statistics

[Reprinted from the MONTHLY LABOR REVIEW, June 1943]

EARNINGS IN AIRCRAFT-PARTS PLANTS, NOVEMBER 1942 [1]

Summary

THE straight-time average hourly earnings of day-shift workers, who constituted 55 percent of the labor force of 149 aircraft-parts plants studied by the Bureau of Labor Statistics, amounted to 91.1 cents per hour in November 1942. Women, who comprised nearly one-fifth of the workers studied in detail, earned an average of 68.9 cents per hour as compared with 96.1 cents for men. Plants in the North Central States showed the highest straight-time earnings. Wide ranges were found in the average rates paid by different plants for similar work. There appeared to be no marked relationship between earnings and size of plant, and incentive systems of wage payment were not common. Estimated straight-time average hourly earnings in a group of 94 plants for which comparable data were available rose from 78.7 to 98.3 cents per hour between January 1941 and November 1942.

Nature of the Industry

The aircraft-parts industry is made up of numerous establishments acting primarily as subcontractors for the producers of military planes. These aircraft-parts establishments vary greatly with respect to size and productive processes, and the parts they manufacture range from minute fittings to major subassemblies. Although most of the plants manufacture many different kinds of parts, a few are highly specialized and produce only one or a small number of items.

The industry has developed largely as a result of the expanded aircraft-production program since the outbreak of the war. In 1939, the number of establishments engaged exclusively in the production of parts for aircraft was relatively small. The rapid growth of the industry since early 1940 may be attributed mainly to two factors: (1) The heavy demand upon the aircraft manufacturers to meet ever-increasing production schedules necessitated the subcontracting to outside plants of much of the work on small parts and subassemblies in order to release critical floor space in the airplane assembly factories. (2) Thousands of manufacturers in other industries, whose usual lines of production had been curtailed because of shortages of materials, were forced to turn to defense production or shut down their plants; many of them consequently converted all or part of their plant facilities to the production of aircraft parts, thereby utilizing valuable machine tools and skilled labor forces in an essential war industry.

Of the 149 plants included in the present survey of wages in the aircraft-parts industry, more than half have either converted from

[1] Prepared in the Bureau's Division of Wage Analysis by Edith M. Olsen under the supervision of H. M. Douty.

other industries or have been established for the production of aircraft parts since 1940. Many of these plants are still manufacturing other products in addition to aircraft parts. This is especially noticeable in the North Central States where nearly all of the plants included in this study have converted from the manufacture of other products. Also, many of the plants in this region are comparatively large and have contracts for the manufacture of other types of war products. Consequently, some of the plants in the North Central area employ appreciable numbers of workers for these other operations despite the fact that their principal products are aircraft parts. However, at the time of the Bureau's survey, in October and November of 1942, more than 85 percent of all the workers employed in the 149 plants studied were actually engaged in the production of aircraft parts.

Although the establishments are widely scattered geographically, there are marked concentrations of parts plants around the centers of greatest importance in the airframe-assembly industry. In the Los Angeles area, for instance, the spectacular growth of the airframe industry has been accompanied by the development of a subsidiary parts industry. In the East, where the aircraft industry was first established, there has been a similar development; however, parts plants in this area are more widely distributed geographically than in California, as the eastern airframe industry is scattered from Maryland to Connecticut.

Scope and Method of Survey

This report on wages in the aircraft-parts industry is one of a series of studies of the aircraft industry made by the Bureau of Labor Statistics. Earlier reports analyzed the earnings of workers employed in the airframe, engine, and propeller branches of the industry, and a separate article on the aircraft-parts industry in California was recently published.[2]

In order to insure comparability of the wage data obtained, it was obviously necessary to limit the scope of the survey to plants performing the same general types of operations. Therefore, only those establishments engaged primarily in metalworking operations were included. Despite a general similarity in the types of operations performed in these plants, however, there is a very great diversity in the types of aircraft parts they produce. Some of the typical products which are currently being manufactured in the plants studied are wing, tail, and fuselage parts, hydraulic assemblies, undercarriage parts, struts, wheels, cowlings, fuel tanks, and innumerable smaller parts. Excluded from the scope of the present study are plants engaged primarily in the manufacture of aircraft parts in the following categories: Electrical equipment and accessories, aircraft armor plate, engine and flight instruments, and parts made entirely of rubber, wood or plastics.

Because of the heterogeneous nature of this branch of the aircraft industry, even within the limits described above, it is unusually difficult to select any group of establishments to represent adequately the

[2] Reports on various branches of the aircraft industry now available are Bureau of Labor Statistics Bulletins No. 704 (Wage Rates in the California Airframe Industry, 1941) and No. 728 (Wage Rates in the Eastern and Midwestern Airframe Industry, 1942). An article, Earnings in Aircraft-Engine Plants, May 1942, appeared in the Monthly Labor Review for December 1942 and is available separately as Serial No. R. 1505. The Monthly Labor Review for April 1943 contained two articles on airplane manufacture—Wages in the Aircraft-Propeller Industry, October 1942, and Earnings in California Aircraft-Parts Plants, November 1942.

entire parts industry. Nevertheless, the 149 plants included are believed to constitute a representative sample of the aircraft-parts industry as it has been defined for the purpose of this study. The factors of location, size of plant, unionization, and corporate affiliation, as well as type of product, were taken into account in selecting the sample.

As noted above, most of the plants manufacture several different kinds of parts; as a result the wage data cannot be analyzed according to type of product. In spite of the variation in products manufactured, however, all of the plants studied were found to have very similar occupational patterns. Standard job descriptions were used by the field representatives of the Bureau in order to assure the greatest possible uniformity in the classification of occupations in the various plants.

The 149 plants covered by the survey are scattered from the East to the West Coast, although, as already noted, there is a concentration of plants in certain sections of the country. The distribution of the plants and workers studied, by region and State, is indicated in table 1.

TABLE 1.—*Number of Aircraft-Parts Plants and Percent of Workers Covered by Survey, by Region, November 1942*

Region	Number of plants	Percent of—	
		Plants	Workers
All regions	149	100.0	100.0
Eastern States [1]	36	24.2	16.4
North Central States [2]	57	38.2	57.1
California [3]	41	27.5	20.0
Southwestern States [4]	15	10.1	6.5

[1] Plants distributed as follows: Connecticut, 3; Maryland, 2; Massachusetts, 3; New Jersey, 5; New York, 19; Pennsylvania, 4.
[2] Plants distributed as follows: Illinois, 6 (5 in Chicago); Indiana, 6; Michigan, 19 (13 in Detroit); Minnesota, 4; Ohio, 18; Wisconsin, 4.
[3] Plants distributed as follows: Los Angeles area, 35; San Diego, 5; San Francisco, 1.
[4] Plants distributed as follows: Kansas, 4; Colorado, 2; Missouri, 2; Oklahoma, 4; Texas, 3.

Nearly three-fifths (57.1 percent) of the workers for whom detailed occupational wage data were compiled were employed in the 57 plants in the North Central States. California accounted for 41 plants, the greatest number in any one State, and for 20 percent of all the workers. The Eastern region was represented by 36 plants employing 16.4 percent of the workers. The remaining 15 plants were scattered throughout Kansas, Colorado, Missouri, Oklahoma, and Texas, and employed only 6.5 percent of the workers.

Detailed occupational data were obtained in the 149 plants for all first- or daylight-shift workers engaged in the production of aircraft parts at the time of the survey. These first-shift workers constituted over 55 percent of the total number of aircraft employees in the plants studied. Separate occupational data were obtained for male and female workers. Various kinds of general plant information, such as overtime-payment policies, shift differentials, entrance rates, recent wage-rate changes, and unionization, were obtained for each plant in order to facilitate the analysis of the wage data. The information for the present survey was collected by experienced field representatives of the Bureau from pay-roll and other plant records. Most of

the wage data relate to representative pay-roll periods in November 1942. In some plants, however, wage data were obtained for a representative week shortly before or shortly after November.

Characteristics of the Labor Force

There was considerable variation, among the plants studied, in the proportions of skilled workers employed. In some of the larger plants, where many of the operations have been divided into relatively routine tasks, a large percentage of the workers were doing simple machine and assembly work. In some of the smaller plants, on the other hand, the labor force was made up almost entirely of highly skilled mechanics.

Women were employed in production work by 113 of the 149 plants included in the survey. These women constituted 20.7 percent of the total working force employed on aircraft-parts production, and 18.3 percent of all the first-shift workers for whom occupational wage rates were obtained. Over 19 percent of the workers studied in California as well as in the North Central States were women; in the Eastern area, they accounted for 16.2 percent of the workers and in the remaining States for only 12.4 percent. Women were employed in a great number of different occupations, as table 4 will indicate, although relatively few were working in the highly skilled occupations.

Negroes were employed in 57 of the 149 plants, but comprised only 2.6 percent of the total labor force engaged in the production of aircraft parts. Most of the Negroes were working as janitors, helpers, laborers, and truck drivers, but a considerable number were employed as assemblers, anodizers, and machine operators. With minor exceptions, the few Negro women found in these plants were engaged as janitresses.

Forty-eight of the 149 plants studied were operating under agreements with nationally affiliated labor unions. In 24 cases the unions were affiliated with the Congress of Industrial Organizations, and in an equal number with the American Federation of Labor. In two other plants, both in California, negotiations with nationally affiliated unions were in progress at the time of the survey. Fourteen companies reported agreements with independent unions, and the remaining 85 plants reported no union agreements.

The extent to which the aircraft-parts industry was organized by labor unions varied greatly in the different sections of the country. Union agreements were in effect in 35 of the 57 plants in the North Central region. Nineteen of these 35 plants were organized by C. I. O. unions, 9 by A. F. of L. organizations, and the remaining 7 by unaffiliated unions. Ten of the 19 Michigan plants, most of which had been converted to aircraft-parts production from the automobile industry, were organized by the United Automobile Workers, Congress of Industrial Organizations. In the East, 12 of the 24 plants studied were organized by labor unions—6 by A. F. of L., 4 by C. I. O., and 2 by unaffiliated unions. Five of the 9 labor unions found in the California plants were affiliated with the American Federation of Labor, and the other 4 were independent. In the Southwestern States, only 6 of the 15 plants were organized—4 by A. F. of L., 1 by C. I. O., and 1 by an independent union.

Most of the companies were training some new and inexperienced workers in the plants. Approximately 9 percent of all the first-shift

workers covered were classified as trainees in various occupations. Slightly more than half of these trainees were women, most of whom were learning to be assemblers, inspectors, or machine operators. Nearly 50 percent of the male trainees were employed as machine operators. The plants in California and in the North Central States employed a much larger percentage of trainees than did those in the other areas.

Wage-Payment Practices

Employees in all of the plants studied were paid time and a half for all work above 40 hours a week, and 108 of the plants also applied the overtime rate to all work above 8 hours a day. One plant paid time and a half for all work after 7½ hours a day, and another paid double time for all work after 11 hours in 1 day. Twenty-six plants paid time and a half and 111 paid double time for work on the seventh consecutive day. Holiday work was compensated for at the rate of time and a half in 94 plants and at double time in 12 plants.

Fifty-six of the 149 plants were operating on a 3-shift basis, but only 16.6 percent of all the aircraft-parts employees were working on the third shift. Nearly 19 percent of the workers employed in the plants in the North Central region were on the third shift, whereas in the California plants third-shift workers constituted only 7.9 percent of the labor force. Sixty-nine plants were operating 2 shifts; 28 percent of all workers were employed on the second shift. The remaining 24 plants had only 1 shift. Somewhat more than half (55.4 percent) of the total working force employed on aircraft-parts production was scheduled on the first shift.

Among the 125 plants operating more than one shift, there was little uniformity with respect to the payment of wage differentials to workers on evening and/or night shifts. In 29 of these plants, no differential was paid to second-shift workers, and in 7 plants no differential was paid for work on either the second or third shifts (table 2). Although many of the companies paid a higher premium, the most common rate, an additional 5 cents per hour above the base rate, was paid to second-shift workers in 43 plants. Twenty-two of the companies operating three shifts paid greater differentials to workers on the third or night shift than to those on the second or evening shift.

Nineteen of the companies reported no established uniform hiring rates for new workers. Among the companies which reported standard entrance-rate schedules, new workers were most commonly paid starting rates between 50 and 60 cents an hour. In several cases the entrance rates for new female employees were lower than those for men. There was no uniformity among the plants in the provisions made for automatic increases in rates after specified periods of service. In many of the plants, workers were granted wage increases only on the basis of individual merit. In the plants where automatic raises based on length of service were reported, the usual amount of the increase was 5 cents an hour, at intervals ranging from 4 to 6 weeks, until basic job rates were attained.

537420—43——2

TABLE 2.—*Wage Differentials for Second and Third Shifts in 149 Aircraft-Parts Plants, November 1942*

Number of shifts worked	Number of plants	Differentials paid for—	
		Second shift	Third shift
Plants with 1 shift only	24		
Plants with 2 shifts	17	No differential	
	2	3 cents per hour	
	25	5 cents per hour	
	4	6 cents per hour	
	1	8 cents per hour	
	3	10 cents per hour	
	1	10 cents per hour, plus pay for 20-minute lunch period.	
	2	10 hours' pay for 9.5 hours' work	
	2	5 percent over base rate	
	1	5 percent of weekly wage	
	1	5 percent of gross earnings	
	2	10 percent over daily rate	
	5	10 percent over weekly rate	
	1	15 percent over base rate	
	1	Paid for 30-minute lunch period	
	1	9.5 hours' pay for 9 hours' work	
Plants with 3 shifts	7	No differential	No differential.
	1	do	5 cents per hour.
	1	do	10 percent of hourly rate.
	1	do	8 hours' pay for 7 hours' work.
	1	do	8 hours' pay for 7.5 hours' work.
	1	do	14.5 percent over base rate.
	2	2.5 cents per hour	5 cents per hour.
	1	3.5 cents per hour	3.5 cents per hour.
	1	4 cents per hour	4 cents per hour.
	11	5 cents per hour	5 cents per hour.
	1	do	7 cents per hour.
	3	do	10 cents per hour.
	2	do	8 hours' pay for 6 hours' work.
	1	do	8 hours' pay for 6.5 hours' work.
	1	5.5 cents per hour plus 8 hours' pay for 7.5 hours' work.	11 cents per hour, plus 8 hours' pay for 7 hours' work.
	1	6 cents per hour	6 cents per hour.
	2	do	6 cents per hour, plus 8 hours' pay for 6.5 hours' work.
	1	6.5 cents per hour	6.5 cents per hour.
	1	7.5 cents per hour	7.5 cents per hour.
	1	8 cents per hour	8 cents per hour.
	1	do	12 cents per hour.
	1	10 cents per hour	10 cents per hour.
	1	One-fifteenth of first-shift rate	One-seventh of first-shift rate.
	4	5 percent over base rate	5 percent over base rate.
	1	do	7.5 percent over base rate.
	1	do	10 percent over base rate.
	3	10 percent over base rate	Do.
	1	10 percent over weekly rate	10 percent over weekly rate.
	1	50 cents per day	50 cents per day.
	1	8 hours' pay for 7 hours' work	8 hours' pay for 7.5 hours' work.

Incentive methods of wage payment were not typical in these aircraft-parts plants in November 1942. Virtually nine-tenths (88.7 percent) of all the workers for whom occupational wage rates were compiled were paid on a time basis. Piece-work or production-bonus systems were in effect in only 26 of the 149 plants studied, and approximately 42 percent of the workers in these 26 plants were paid under such systems. Eighteen of the 26 plants making use of incentive systems are in the North Central States, 7 in the East, and 1 in California. Incentive wage systems are not confined to the larger plants in the industry; over half of the companies operating such systems employed fewer workers than the average for the 149 establishments included in the survey.

Hours and Earnings, 1941–42

For the purpose of showing the general trend in the level of earnings of the plants currently producing aircraft parts, data on average hours and earnings, including premium pay for overtime work and shift-differential payments, were obtained for all wage earners employed in the plants for pay-roll periods in January 1941, May 1942, and for the November 1942 pay-roll period on which the occupational wage data are based. These hours and earnings data are shown by region in table 3. It must be emphasized that this material relates to the total employment of the plants in the respective regions and that these workers include some who were employed on products other than aircraft parts. As was indicated earlier, a larger percentage of the workers in the North Central States was employed on other products than was the case in any of the other regions. The number of workers employed on other operations in each region was, of course, greater for the two earlier periods than for November, since prior to that time many of the companies had not completed the conversion of their facilities to aircraft-parts production. It will be recalled that during November 1942, more than 85 percent of all the workers in the 149 plants studied were employed on aircraft-parts manufacture.

In each of the regions, these data were not available for some of the plants during the January 1941 and the May 1942 pay-roll periods; in the North Central region, information on 1 of the 57 plants was not available for November 1942. For all the States combined, comparable data were reported for 94 plants during the January 1941 pay-roll period, and for 131 plants during the May 1942 period. During the week shown for November 1942, wage earners in the 148 plants represented worked an average of 47.1 hours and received an average of $50.06. Gross average hourly earnings thus amounted to $1.063.

Average hours and earnings for a group of 94 identical plants for which the data were available during all three of the periods under consideration are also shown in table 3. In these 94 plants, gross average hourly earnings increased from 81.9 cents in January 1941 to $1.07 in November 1942, or a rise of 25.1 cents an hour. Gross average weekly earnings increased from $33.93 to $50.46 during the same period. This change in the gross earnings, however, was accompanied by a rise of 5.8 hours in the average workweek, an increase which resulted in greater premium overtime payments. It is estimated that elimination of these extra overtime payments would reduce the increase in average hourly rates between January 1941 and November 1942 from 25.1 to 19.6 cents.

At least one general wage increase since January 1941 was reported by approximately one-third of the 149 plants studied, and several companies reported two or three such raises. Most of these general wage changes were from 5 to 10 cents per hour, although in a few cases the increase was much greater. In most of the plants which reported no general wage changes, increases in hourly rates had been granted to individual workers.

These over-all earnings data are presented only to indicate very general trends. Changes in the composition of the labor force in many of the plants, and the increase in late-shift premiums have undoubtedly combined to emphasize the apparent rise in earnings between January

1941 and November 1942. In making regional comparisons on the basis of these data, it should be remembered that variations in the number of employees receiving premium payments for work on late shifts tend to obscure the amount of the regional wage differences.

TABLE 3.—*Average Hours and Earnings of Workers in Aircraft-Parts Plants, by Region, for Specified Periods, 1941–42*

Year and month	Number of plants	Average weekly earnings [1]	Average weekly hours	Average hourly earnings [1]	Estimated average hourly earnings, excluding premium overtime payments [2]
All States:					
All plants:					
January 1941	94	$33.93	41.4	$0.819	$0.787
May 1942	131	48.13	47.8	1.006	.920
November 1942	[3] 148	50.06	47.1	1.063	.977
Identical plants:					
January 1941	94	33.93	41.4	.819	.787
May 1942	94	48.71	48.2	1.011	.922
November 1942	94	50.46	47.2	1.070	.983
Eastern States:					
January 1941	24	29.94	42.9	.698	.662
May 1942	33	42.94	49.1	.875	.793
November 1942	36	44.83	48.8	.919	.835
North Central States: [4]					
January 1941	43	34.26	40.7	.841	.814
May 1942	52	49.58	47.2	1.051	.966
November 1942	56	51.69	46.6	1.110	1.025
California:					
January 1941	23	37.69	45.3	.832	.774
May 1942	35	49.44	49.4	1.001	.905
November 1942	41	50.92	48.1	1.059	.967
Southwestern States: [5]					
January 1941	4	27.62	39.0	.708	.694
May 1942	11	40.75	47.9	.851	.778
November 1942	15	41.80	46.2	.904	.836

[1] Including overtime premium pay and shift-differential payments.
[2] Includes shift-differential payments.
[3] Data for 1 plant not available.
[4] Data for 1 large plant used with reduced weight in order to avoid overrepresentation of this plant.
[5] Includes the 2 plants in Colorado.

Variations in Plant Average Hourly Earnings

In November 1942, average hourly earnings, including premium overtime and shift-differential payments for the workers employed on aircraft-parts production, amounted to $1.045 as compared with the gross average of $1.063 shown above for total plant employment during the same pay-roll period. This slight difference in earnings (1.8 cents an hour) is presumably due, at least in part, to the fact that most of the trainees in these plants were employed on aircraft parts.

A distribution of the plants, according to the gross average hourly earnings of workers making aircraft parts in November 1942, and the percentage of workers employed by the plants in each earnings interval appear in table 4. Twenty of the establishments studied showed plant average hourly earnings of $1.20 or more an hour, and employed 22 percent of the workers; 15 of these establishments were in the North Central States, and 5 in California. The 58 plants with averages between 90 cents and $1.05 an hour employed 47 percent of all the aircraft workers in the 148 plants for which plant averages were available.

TABLE 4.—*Distribution of Aircraft-Parts Plants and Workers, by Plant Average Hourly Earnings,[1] November 1942*

Plant average hourly earnings [2]	Number of plants	Percent of workers
Under 80 cents	23	5.2
80 and under 85 cents	10	7.0
85 and under 90 cents	17	5.7
90 and under 95 cents	20	10.0
95 cents and under $1	20	15.6
$1 and under $1.05	18	21.2
$1.05 and under $1.10	7	4.0
$1.10 and under $1.20	13	9.3
$1.20 and under $1.30	8	12.8
$1.30 and over	12	9.2
Total	[3] 148	100.0
Average for all plants		$1.045

[1] Includes only workers employed on aircraft-parts production.
[2] Earnings shown include overtime premium pay and shift-differential payments.
[3] Wage data not available for 1 plant.

Differences in the levels of earnings among these plants reflect several factors in addition to differences in basic wage rates. Included are regional differentials, variations in the amounts of extra payments for work on late shifts, and differences in the length of the average workweek and, therefore, in the relative amounts of premium pay for overtime. There was no uniform relationship between earnings levels and size of plant. Plants with 100 workers or less, as well as plants with over 900 workers, were found in each interval shown in table 4.

Earnings by Occupation, November 1942

The occupational wage data given in table 5 are based on the earnings of virtually all first- or daylight-shift workers engaged in aircraft-parts production.[3] It will be recalled that more than 55 percent of the total number of aircraft employees in the 149 plants studied were working on the first shift. The occupational earnings data are shown separately for male and female workers. Although many of the female occupations contained too few workers to justify the computation of average earnings for all regions, the occupations were included in the table to give a complete picture of the range of occupations in which women were employed at the time of the survey.

As a group, the first-shift wage earners in the 149 plants surveyed received average straight-time earnings of 91.1 cents an hour in November 1942. The difference between this average and the gross average of $1.045 shown above for aircraft workers reflects the effect upon earnings of premium overtime rates and shift-differential payments. It is estimated that elimination of overtime premium payments alone would reduce gross earnings from $1.045 to 95.8 cents an hour. First-shift male workers were paid an average hourly rate of 96.1 cents, or 5 cents more than the combined average of 91.1 cents for all workers. Women, who constituted 18.3 percent of all first-shift wage earners, received an average of 68.9 cents an hour.

Straight-time average hourly earnings for all plants combined ranged from $1.622 an hour for class A male drop-hammer operators,

[3] A few first-shift occupations have been omitted because they were represented in too few plants or by too few workers. Data for one large plant were used with reduced weight in order to avoid overrepresentation of this plant.

to 54.1 cents an hour for female journeymen's helpers. Nearly one-third of the employees were in occupations in which the average wage was $1.00 or more an hour. Workers in 25 of the occupational groups, excluding trainees and apprentices, showed average earnings of less than 70 cents an hour; 8 percent of the workers were employed in these groups.

Among male workers, 42 occupational groups showed straight-time averages of $1.00 or more an hour and included 37.8 percent of the male workers for whom detailed wage data were compiled; slightly more than 5 percent of the male workers were classified in the 6 occupational groups in which earnings averaged $1.25 or more an hour. Approximately 15 percent of the male employees, excluding trainees and apprentices, were classified in the 17 occupational groups in which the combined averages for all plants were 80 cents an hour or less. Class B bench assemblers, who constituted the largest male group, averaged 90.5 cents an hour and represented 3.3 percent of the total number of first-shift workers.

More than two-thirds of the female workers, excluding trainees and apprentices, were employed in the 46 occupational groups having average hourly earnings of 80 cents or less, and well over one-half of this number averaged 70 cents or less. In only one occupation, class A welders, were female workers paid over $1.00 an hour. Inspectors, class C (female), the largest single occupational group, accounted for 2.1 percent of all workers and averaged 63.4 cents an hour.

TABLE 5.—*Straight-Time Average Hourly Earnings* [1] *of First-Shift Workers in Aircraft-Parts Plants, by Occupation, Sex, and Region, November 1942*

Occupation and class	All States		Eastern States		North Central States		California		Southwestern States	
	Percent of workers	Average hourly earnings	Percent of workers	Average hourly earnings	Percent of workers	Average hourly earnings	Percent of workers	Average hourly earnings	Percent of workers	Average hourly earnings
All workers	100.0	$0.911	100.0	$0.819	100.0	$0.948	100.0	$0.914	100.0	$0.811
Males	81.7	.961	83.8	.858	80.7	1.008	80.8	.962	87.6	.828
Females	18.3	.689	16.2	.617	19.3	.698	19.2	.711	12.4	.695
Males										
Acetylene-burner operators	(2)	.992			(2)	1.050			(2)	(2)
Acid dippers	.4	.814	.5	.901	.3	.819	.5	.729	.3	.772
Anodizers, class A	.1	1.032			.1	1.010	.1	1.082	(2)	(2)
Anodizers, class B	.1	.812			.1	.829			(2)	(2)
Apprentices	.5	.748	.6	.901	.5	.712	.4	.750	.4	.573
Assemblers, bench, class A	1.2	1.019	1.3	.865	1.0	1.029	2.3	1.077		
Assemblers, bench, class B	3.3	.905	3.9	.715	3.4	.991	3.4	.879	2.5	.783
Assemblers, bench, class C	1.4	.748	1.6	.654	1.5	.795	1.1	.755	2.0	.617
Assemblers, floor, class A	2.3	1.226	1.3	.698	3.5	1.297	.5	.973	.1	(3)
Assemblers, floor, class B	1.4	.840	.9	.542	1.7	.897	1.6	.803		
Assemblers, floor, class C	.2	.737	.1	.700	.2	.783	.3	.678	.1	(3)
Blacksmiths	(2)	1.071	.1	(3)	(2)	1.141				
Boring-mill operators, class A	.3	1.219	.1	(3)	.4	1.252	.2	1.086		
Boring-mill operators, class B	.1	.948	.1	.908	.1	.978	.1	(3)	.1	(3)
Broaching-machine operators	.1	.958	.1	.674	.1	1.075	(2)	(3)		
Buffers	.9	.963	2.0	.909	.7	1.075	.6	.800	.4	.764
Burrers, class B	1.2	.931	1.6	.823	1.2	1.027	1.3	.797	.1	(3)
Burrers, class C	.6	.714	.8	.649	.3	.745	1.3	.732	.4	.633
Carpenters, maintenance, class A	.3	1.069	.3	.857	.2	1.113	.5	1.123	.1	(3)
Carpenters, maintenance, class B	.3	.882	.4	.710	.3	.964	.3	.871	.2	.792
Clerks, production	.4	.842			.4	.820	.7	.880		
Clerks, shipping and receiving	.8	.828			.9	.830	1.2	.841	.6	.717
Clerks, stocks and stores	2.9	.826	3.0	.735	2.9	.873	3.4	.801	2.7	.739
Craters, class A	.1	1.020			.1	1.017	.1	1.075	(2)	(3)
Craters, class B	.1	.826	(3)	(3)	.1	.834	(3)	(3)	.1	(3)

See footnotes at end of table.

TABLE 5.—*Straight-Time Average Hourly Earnings* [1] *of First-Shift Workers in Aircraft-Parts Plants, by Occupation, Sex, and Region, November 1942*—Continued

Occupation and class	All States		Eastern States		North Central States		California		Southwestern States	
	Percent of workers	Average hourly earnings	Percent of workers	Average hourly earnings	Percent of workers	Average hourly earnings	Percent of workers	Average hourly earnings	Percent of workers	Average hourly earnings
Males—Continued										
Die setters	0.2	$0.962	(2)	(2)	0.3	$0.958	0.1	$0.996	------	------
Drill-press operators, class A	1.4	1.069	0.5	$1.005	2.0	1.095	1.2	.962	------	------
Drill-press operators, class B	1.3	.896	1.8	.785	1.2	.965	1.8	.858	0.1	(3)
Drill-press operators, class C	1.0	.740	1.6	.627	.7	.807	1.6	.758	.4	$0.622
Drop-hammer operators, class A	.5	1.622	1.8	1.664	.3	1.829	.2	1.110	.4	.926
Drop-hammer operators, class B	.4	1.041	1.2	1.214	.1	.940	.3	.885	1.1	.784
Electricians, class A	.4	1.162	.1	.953	.4	1.204	.4	1.151	.4	1.017
Electricians, class B	.2	.969	.1	.915	.2	.994	.1	.986	.3	.833
Electricians, class C	.1	.846	(2)	(2)	.1	.886	(2)	(2)	.1	(2)
Expediters	.2	.937	------	------	.1	1.050	.2	.881	.8	.815
Firemen, stationary boiler	.2	.838	.3	.762	.2	.871	(2)	(2)	------	------
Foremen, working, class A	1.8	1.303	1.0	1.204	1.5	1.311	3.4	1.318	1.2	1.287
Foremen, working, class B	1.4	1.035	.9	.902	1.4	1.054	1.6	1.042	2.8	1.051
Foremen, working, class C	.2	.860	(2)	(2)	.1	.811	.4	.918	1.4	.857
Gear cutters, class B	(2)	.911	------	------	(2)	.911	------	------	------	------
Grinding-machine operators, class A	1.0	1.160	1.1	1.057	1.2	1.209	.9	1.113	.4	(2)
Grinding-machine operators, class B	.7	.953	.9	.801	.7	1.032	.5	.909	.3	.821
Grinding-machine operators, class C	.1	.856	.1	(2)	.1	.941	.1	.840	.4	.667
Heat treaters, class A	.2	1.135	.1	.966	.2	1.178	.2	1.078	.1	(2)
Heat treaters, class B	.3	.875	.4	.772	.3	.940	.1	.802	.8	.811
Helpers, journeymen's	.8	.844	1.9	.985	.4	.765	.8	.830	2.1	.669
Helpers, machine operators'	.9	.767	1.3	.691	.6	.861	.7	.747	2.5	.668
Helpers, other	.5	.801	(2)	(2)	.5	.911	.8	.716	1.4	.621
Inspectors, class A	2.1	1.106	1.1	.979	2.3	1.105	2.9	1.160	.7	.977
Inspectors, class B	2.6	.925	3.9	.789	2.6	.984	1.8	.959	1.7	.818
Inspectors, class C	1.2	.819	1.1	.686	1.1	.873	1.1	.858	1.9	.663
Inspectors, receiving	.1	.836	------	------	(2)	(2)	.3	.854	(2)	(2)
Janitors	1.5	.729	1.7	.635	1.5	.773	1.5	.730	1.3	.572
Job setters	1.2	1.167	1.1	1.032	1.6	1.207	.5	1.126	.4	.851
Laborers	1.8	.732	2.1	.681	2.0	.772	1.2	.638	.7	.631
Lathe operators, engine, class A	.9	1.205	.8	1.084	.6	1.281	2.0	1.197	.6	1.017
Lathe operators, engine, class B	.7	.986	.8	.823	.6	1.047	1.0	1.017	.5	.809
Lathe operators, engine, class C	.2	.809	.1	(2)	.2	.816	.4	.848	.1	(2)
Lathe operators, turret, class A	1.9	1.190	1.7	1.061	2.0	1.225	2.0	1.231	1.6	.996
Lathe operators, turret, class B	1.2	.973	1.8	.834	1.2	1.033	1.3	.976	------	------
Lathe operators, turret, class C	.3	.908	.2	(2)	.3	1.025	.4	.788	.2	.710
Lay-out men, class A	.1	1.273	.1	(2)	.1	1.347	.1	1.143	(2)	(2)
Lay-out men, class B	(2)	.947	(2)	(2)	(2)	1.083	------	------	(2)	(2)
Loaders and unloaders; racks and conveyors	.3	.701	------	------	.4	.721	.1	.763	.6	.563
Machine operators, all-round, class A	.7	1.015	3.2	1.006	.2	1.084	.2	.993	.4	.906
Machine operators, all-round, class B	.8	.728	3.1	.670	.1	.866	.3	.866	2.3	.801
Machinists, general	1.0	1.080	.9	1.096	.5	1.162	.8	1.178	6.0	.970
Maintenance men, general	.2	.867	.2	.778	.2	.911	------	------	.8	.805
Metal-saw operators	.3	.841	.3	.634	.3	.916	.2	.824	.4	.761
Milling-machine operators, class A	.9	1.175	.4	1.046	.9	1.210	1.7	1.147	(2)	(2)
Milling-machine operators, class B	1.1	.972	1.4	.748	1.1	1.062	1.1	.960	.8	.891
Milling-machine operators, class C	.2	.836	(2)	(2)	.2	.907	.5	.802	.1	(3)
Millwrights, class A	.3	1.118	.4	1.001	.4	1.142	.1	1.191	------	------
Millwrights, class B	.4	.871	.8	.771	.4	.920	(2)	(3)	------	------
Oilers, maintenance	.2	.836	(2)	(2)	.2	.862	.1	.817	.3	.719
Packers	.4	.829	.7	.745	.4	.872	(2)	(3)	(2)	(2)
Painters, production	.7	.955	.6	.747	.7	1.033	.6	.893	.7	.839
Painters, maintenance	(2)	.961	------	------	(2)	.955	(2)	(3)	------	------
Patternmakers, wood	.2	1.272	------	------	.2	1.247	.1	1.431	------	------
Pipefitters, maintenance	.3	1.061	.2	.855	.4	1.091	(2)	(3)	------	------
Planer operators	(2)	1.046	(2)	(2)	(2)	1.124	(2)	(3)	------	------
Platers	.3	.972	.4	.918	.3	.989	.2	1.030	.3	.883
Power-brake operators, class A	(2)	1.000	------	------	------	------	.1	1.000	------	------
Power-shear operators	.2	.930	.1	.842	.3	.971	.2	.829	.2	.860
Punch-press operators, class A	.2	.993	------	------	.1	.998	.3	1.020	.3	.883
Punch-press operators, class B	1.0	.887	.8	.861	1.2	.906	.6	.825	.2	(3)
Punch-press operators, class C	.3	.721	.1	.696	.5	.721	(2)	(3)	(2)	(3)
Repairmen, machine	.8	1.031	.8	.942	.7	1.136	.9	1.072	.4	.850
Repairmen, product	.3	1.083	.2	.786	.5	1.120	------	------	------	------
Riveters, pneumatic	1.2	.990	.3	.624	2.0	1.012	(2)	(2)	.2	.589
Riveting-machine operators	.3	.973	.1	.664	.1	.830	(2)	(3)	4.1	.794
Router operators	.1	.850	------	------	.1	.859	.1	(3)	------	------
Salvagers	.1	.933	------	------	.2	.912	.2	.995	------	------

See footnotes at end of table.

TABLE 5.—*Straight-Time Average Hourly Earnings* [1] *of First-Shift Workers in Aircraft-Parts Plants, by Occupation, Sex, and Region, November 1942*—Continued

Occupation and class	All States		Eastern States		North Central States		California		Southwestern States	
	Percent of workers	Average hourly earnings	Percent of workers	Average hourly earnings	Percent of workers	Average hourly earnings	Percent of workers	Average hourly earnings	Percent of workers	Average hourly earnings
Males—Continued										
Sandblast operators	0.3	$0.882	0.3	$0.775	0.2	$1.002	0.2	$0.873	1.0	$0.753
Screw-machine operators, class A	.7	1.212	.5	.967	.9	1.255	.5	1.192	----	----
Screw-machine operators, class B	.5	1.037	.2	.781	.8	1.069	.3	.956	----	----
Screw-machine operators, class C	.4	.862	.2	.682	.6	.879	.1	.831	----	----
Shaper operators	.2	.977	.3	.923	.1	1.195	(2)	(3)	1.0	.778
Sheet-metal workers, class A	.7	1.119	.7	1.180	.7	1.132	.6	1.117	.8	(3)
Sheet-metal workers, class B	.7	.820	1.8	.815	.3	.887	.6	.823	1.7	.709
Solderers, class B	.1	1.106	----	----	.1	1.101	.5	(3)	----	----
Solderers, class C	(2)	.840	----	----	(2)	.906	----	----	.1	(3)
Straighteners	.1	.910	.1	.700	(2)	1.103	.2	.880	.2	(3)
Template makers, class A	.1	1.251	(3)	(3)	.1	1.253	(3)	(3)	(3)	(3)
Template makers, class B	.1	.954	----	----	.1	.960	----	----	.1	(3)
Template makers, class C	.1	.756	----	----	.2	.764	----	----	.2	(3)
Testers, class A	.1	1.059	.2	.886	.1	1.174	.1	1.106	.2	.940
Testers, class B	.2	.853	.5	.842	.2	.848	.2	.912	.2	(3)
Testers, class C	.3	.773	.2	.703	.3	.845	.4	.715	.6	.646
Thread-milling-machine operators	.2	1.085	.2	.862	.3	1.150	.2	.950	----	----
Timekeepers	.3	.839	.4	.717	.3	.915	.2	.838	.7	.734
Toggle-press operators	(2)	.900	----	----	(2)	(3)	.1	1.042	----	----
Tool and die makers, class A	2.5	1.346	3.3	1.320	2.3	1.376	3.1	1.330	1.0	1.113
Tool and die makers, class B	.9	1.030	.1	1.010	1.0	1.035	1.1	1.050	1.3	.948
Tool and die makers, class C	.2	.833	----	----	.1	.833	.3	.960	.9	.713
Tool-crib attendants, class A	.3	.924	(3)	(3)	.3	.930	.4	.955	.7	.841
Tool-crib attendants, class B	.2	.707	----	----	.1	.690	.5	.731	.8	.691
Tool grinders	.6	1.072	.4	.947	.7	1.071	.7	1.135	----	----
Trainees, journeyman	.3	.814	.3	.752	.3	.826	.3	.835	----	----
Trainees, machine operators	1.5	.700	2.0	.628	1.0	.744	2.9	.706	.4	.469
Trainees, other	2.5	.700	.6	.615	3.5	.716	1.9	.703	1.3	.448
Truck drivers	.4	.838	.4	.733	.3	.955	.6	.787	.7	.695
Truckers, hand	.8	.771	1.1	.755	.9	.781	.4	.755	(2)	(3)
Truckers, power, inside	.2	.940	----	----	.3	.940	----	----	----	----
Tube benders, class A	(2)	1.066	----	----	(2)	1.185	(2)	(3)	.2	(3)
Tube benders, class B	(2)	.912	----	----	.1	.962	(2)	(3)	.1	(3)
Watchmen	1.2	.733	1.8	.657	.9	.764	1.2	.797	2.1	.662
Welders, hand, class A	2.2	1.171	1.3	.946	1.8	1.186	1.8	1.407	8.7	1.079
Welders, hand, class B	.8	.939	1.3	.942	.3	.973	.4	1.013	5.1	.902
Welders, hand, class C	.3	.732	.1	(3)	(2)	.775	.4	.815	2.1	.694
Welders, machine	.3	.903	.2	.773	.2	.919	.4	.988	.5	.755
Females										
Assemblers, bench, class A	.2	.773	----	----	.2	.707	.2	.919	----	----
Assemblers, bench, class B	1.1	.837	1.3	.747	1.3	.865	1.1	.838	.1	(3)
Assemblers, bench, class C	1.7	.678	3.8	.648	1.4	.690	1.2	.712	----	----
Assemblers, floor, class A	(2)	.855	----	----	(2)	.855	----	----	----	----
Assemblers, floor, class B	.2	.800	----	----	.3	.803	.2	.785	----	----
Assemblers, floor, class C	.2	.656	----	----	(2)	.741	1.1	.647	----	----
Buffers	.1	.592	.2	.568	(2)	.640	*1	(3)	(2)	(3)
Burrers, class B	.2	.729	.3	.637	.2	.819	.5	.693	(2)	(3)
Burrers, class C	1.0	.679	.8	.524	.6	.769	2.9	.662	(2)	(3)
Clerks, production	.2	.689	----	----	.2	.647	.3	.755	----	----
Clerks, shipping and receiving	.1	.623	----	----	.1	.545	.1	.744	(2)	(3)
Clerks, stocks and stores	.5	.672	.4	.647	.5	.649	.7	.717	.6	.731
Drill-press operators, class A	.1	.756	----	----	.1	.756	----	----	----	----
Drill-press operators, class B	.3	.725	.4	.783	.3	.656	.3	.871	.1	(3)
Drill-press operators, class C	1.1	.736	.3	.558	1.4	.790	1.0	.660	1.4	.496
Forewomen, working, class C	(2)	.817	----	----	(2)	(3)	.1	.811	.1	(3)
Grinding-machine operators, class B	(2)	.769	.1	.730	(2)	(3)	----	----	----	----
Grinding-machine operators, class C	(2)	.691	----	----	(2)	.695	(2)	(3)	----	----
Helpers, journeymen's	.1	.541	----	----	.1	.499	(2)	(3)	.4	.617
Helpers, machine operators'	.1	.606	.1	(3)	(2)	(3)	.1	.675	.6	.600
Helpers, other	.1	.654	.1	(3)	(2)	(3)	.4	.696	(2)	(3)
Inspectors, class A	.3	.792	(2)	(3)	.4	.791	(4)	(3)	----	----
Inspectors, class B	.5	.713	1.1	.713	.4	.670	.3	.843	.2	(3)
Inspectors, class C	2.1	.634	2.5	.564	2.5	.626	1.4	.773	.9	.661
Janitresses	.2	.639	.1	(3)	.2	.635	.1	.752	.1	(3)
Laborers	(2)	.613	.1	(3)	(2)	(3)	.1	.683	----	----
Lathe operators, engine, class B	(2)	.844	(2)	(3)	(2)	.843	----	----	----	----
Lathe operators, engine, class C	(2)	.613	----	----	(2)	.650	----	----	.1	(3)
Lathe operators, turret, class B	(2)	.844	.1	.850	(2)	(3)	----	----	----	----

See footnotes at end of table.

TABLE 5.—*Straight-Time Average Hourly Earnings*[1] *of First-Shift Workers in Aircraft-Parts Plants, by Occupation, Sex, and Region, November 1942*—Continued

Occupation and class	All States		Eastern States		North Central States		California		Southwestern States	
	Percent of workers	Average hourly earnings	Percent of workers	Average hourly earnings	Percent of workers	Average hourly earnings	Percent of workers	Average hourly earnings	Percent of workers	Average hourly earnings
Females—Continued										
Lathe operators, turret, class C	(2)	$0.712	(2)	(3)	------	------	0.2	$0.761	0.1	(3)
Loaders and unloaders; racks and conveyors	0.2	.562	------	------	0.3	$0.556	.1	(3)	------	------
Metal-saw operators	(2)	.716	------	------	(2)	.741	(2)	(3)	.2	(3)
Milling-machine operators, class B	.1	.790	0.1	$0.698	.1	.838	(2)	(3)	------	------
Milling-machine operators, class C	.1	.768	------	------	.1	.772	(2)	(3)	------	------
Packers	.4	.605	1.1	.597	.4	.603	.1	.740	------	------
Painters	.2	.592	.2	.544	.2	.604	------	------	------	------
Punch-press operators, class B	(2)	.786	------	------	(2)	.790	.1	.781	------	------
Punch-press operators, class C	.4	.633	.1	.550	.6	.625	.2	.763	.1	(3)
Riveters, pneumatic	.4	.726	------	------	.6	.726	------	------	------	------
Riveting-machine operators	.4	.710	------	------	.2	.543	(2)	(3)	3.9	$0.796
Salvagers	.1	.602	------	------	.1	.602	------	------	------	------
Screw-machine operators, class C	(2)	.652	------	------	.1	.649	(2)	(3)	------	------
Sheet-metal workers, class B	.1	.720	------	------	.1	.777	(2)	(3)	1.1	.665
Solderers, class C	(2)	.721	------	------	(2)	.721	------	------	------	------
Straighteners	(2)	.790	------	------	.1	.760	------	------	------	------
Testers, class C	.1	.581	.2	.554	(2)	.616	(2)	(3)	------	------
Timekeepers	.1	.612	.1	.611	.1	.586	.1	.636	.1	(3)
Tool-crib attendants, class B	.1	.647	------	------	.1	.600	.2	.697	------	------
Tool grinders	.1	.565	------	------	.1	.565	------	------	------	------
Trainees, machine operators	.9	.601	1.0	.545	.4	.559	2.4	.641	.1	(3)
Trainees, other	3.9	.695	1.5	.509	5.4	.710	3.0	.697	.2	.470
Welders, hand, class A	(2)	1.180	------	------	------	------	.1	1.180	------	------
Welders, hand, class B	.1	.808	.1	(3)	------	------	------	------	.8	.819
Welders, hand, class C	.1	.701	------	------	(2)	(3)	.1	.741	1.2	.691
Welders, machine	.1	.702	.1	(3)	.1	.619	.4	.753	------	------

[1] The average hourly earnings shown in this table are exclusive of premium overtime and shift-differential payments.

[2] Less than a tenth of 1 percent. These occupations are included in the table to indicate fully the nature of the occupational pattern in the industry. Although average earnings by occupation are not shown for these workers, their earnings have been included in the average earnings for all workers, and for male and female workers separately.

[3] Too few workers and/or plants to warrant computation of an average.

REGIONAL DIFFERENCES

The magnitude of regional wage differentials is apparent from the weighted averages, shown in table 5, for each geographical region. The highest straight-time average hourly rate for all workers was found in the North Central region; the average for this region was 94.8 cents an hour, or nearly 4 cents an hour more than the combined average for the four regions. The average for California was 91.4 cents an hour, while averages of 81.9 and 81.1 cents are shown for the Eastern States and the Southwestern States, respectively. In most of the occupations for which regional comparisons are possible, the highest hourly averages are found in the North Central region. There is substantial evidence to indicate that earnings in the Michigan plants studied tended to be somewhat above those in the other five States in the North Central region. The proportion of Michigan plants studied, however, is not adequate to warrant the presentation of separate data for that State.

SIZE OF PLANT

A tabulation of occupational earnings by size of plant, in terms of numbers of wage earners employed, yielded no conclusive evidence that workers in large plants received higher earnings generally than those in small plants. In many of the occupations, the average earnings for workers in the smaller plants exceeded the averages for workers employed for similar work in the large plants.

METHOD OF WAGE PAYMENT

The effect of incentive methods of wage payment upon average hourly earnings in the industry appears to be significant, although the numbers of workers paid under such systems are not adequate to permit a detailed analysis of this factor. The averages for plants in which workers were paid under a production-bonus or piece-work system were consistently higher than the average rates paid to time workers in the same occupations. As stated earlier, incentive systems were found to a greater extent in the North Central area than in the plants in any other region; this was one factor contributing to the comparatively higher average rates for this region. The apparent inconsistency in the averages for some occupations is due entirely to the fact that some of the workers were paid under incentive systems. Class B female bench assemblers, for instance, showed an average of 83.7 cents an hour, whereas the class A workers in the same occupation averaged only 77.3 cents an hour; the average for the class B workers was raised by incentive payments in some plants, whereas virtually all of the class A assemblers were paid on a straight hourly basis. A similar situation is found in the case of female drill-press operators, where the class C operators averaged 73.6 cents an hour as compared with 72.5 cents an hour for class B operators.

PLANT RANGES IN OCCUPATIONAL EARNINGS

For most of the occupations studied there was a very wide range in earnings between the highest and the lowest averages for individual plants. The occupations for which individual plant ranges are shown in table 6 were selected for their numerical importance in terms of the numbers of workers included. This tabulation has been confined to plants in the North Central States in order to eliminate, as far as possible, any regional wage difference. The occupations included represent approximately 77 percent of all the first-shift employees studied in the North Central States.

The greatest spread in average straight-time earnings was found for class A working foremen who averaged $2.25 in the plant with the highest rate for this occupation and $1.095 in the plant with the lowest average. The range for class A welders was from 81.3 cents to $1.867 an hour. These ranges are limited in their significance because they show the extremes in plant earnings by occupation and do not indicate the range for individual workers. They do, however, reveal the extent of the variations from the general averages for all plants combined, for each occupation.

TABLE 6.—*Straight-Time Average Hourly Earnings of First-Shift Workers in Selected Occupations in Aircraft-Parts Plants, North Central States, November 1942*

Occupation and class	Number of plants	Average hourly earnings	Individual plant averages	
			High	Low
Male workers:				
Assemblers, bench, class A	21	$1.029	$1.250	$0.743
Assemblers, bench, class B	33	.991	1.323	.675
Assemblers, bench, class C	20	.795	1.260	.500
Assemblers, floor, class A	9	1.297	1.426	.780
Assemblers, floor, class B	8	.897	1.296	.586
Buffers	25	1.075	1.531	.500
Burrers, class B	15	1.027	1.250	.717
Clerks, shipping and receiving	29	.830	1.150	.618
Clerks, stocks and stores	42	.873	1.213	.578
Drill-press operators, class A	19	1.095	1.326	.775
Drill-press operators, class B	27	.965	1.150	.705
Drill-press operators, class C	20	.807	1.100	.542
Foremen, working, class A	34	1.311	2.250	1.095
Foremen, working, class B	23	1.054	1.387	.887
Grinding-machine operators, class A	23	1.209	1.415	.700
Grinding-machine operators, class B	23	1.032	1.292	.500
Helpers, machine operators	15	.861	1.220	.650
Inspectors, class A	33	1.105	1.400	.900
Inspectors, class B	36	.984	1.450	.714
Inspectors, class C	18	.873	.954	.600
Janitors	45	.773	1.000	.500
Job setters	22	1.207	1.675	.683
Laborers	26	.772	1.016	.500
Lathe operators, engine, class A	19	1.281	1.775	.900
Lathe operators, engine, class B	17	1.047	1.375	.838
Lathe operators, turret, class A	20	1.225	1.450	.800
Lathe operators, turret, class B	15	1.033	1.174	.692
Milling-machine operators, class A	16	1.210	1.950	.983
Milling-machine operators class B	21	1.062	1.200	.550
Painters	29	1.033	1.650	.700
Punch-press operators, class A	23	.906	1.219	.875
Repairmen, machine	25	1.136	1.650	.725
Riveters, pneumatic	6	1.012	1.119	.844
Screw-machine operators, class A	19	1.255	1.503	.950
Screw-machine operators, class B	20	1.069	1.300	.670
Screw-machine operators, class C	12	.879	1.078	.600
Sheet-metal workers, class A	12	1.132	1.599	.850
Tool and die makers, class A	42	1.376	2.014	1.103
Tool and die makers, class B	21	1.035	1.350	.914
Tool grinders	18	1.071	1.500	.600
Trainees, machine operators	19	.744	1.000	.500
Trainees, other	12	.716	1.000	.450
Truckers, hand	19	.781	.952	.530
Watchmen	29	.764	.975	.500
Welders, hand, class A	26	1.186	1.867	.813
Female workers:				
Assemblers, bench, class B	9	.865	1.117	.650
Assemblers, bench, class C	18	.690	.830	.480
Burrers, class C	8	.769	.890	.480
Drill-press operators, class C	12	.790	.890	.500
Inspectors, class C	23	.626	.837	.387
Punch-press operators, class C	12	.625	.890	.482
Riveters, pneumatic	2	.726	.825	.686
Trainees, machine operators	9	.559	.750	.400
Trainees, other	12	.710	1.000	.400