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Women Workers and Defense Jobs

EXPERIENCED women registering at employment agencies for industrial jobs are indicative of women's part in manufacturing for defense. The most recent figures by sex¹ show 373,700 such women wanting immediate factory work, three-fourths of them already equipped with various necessary skills. Without doubt the employment agencies will fit these workers into the jobs desired. Almost every factory is a potential producer of defense materials, and a long view indicates the importance of more specific training for women as demand increases for their services, especially in types of work for which they are eminently adaptable but which may be new to them.

Women with Experience in Defense Industries.

Many applicants for work have had experience in making products especially important in the defense program, the numbers of women so equipped being as follows:² Electrical machinery, 17,600; other machinery, 6,700; metal and metal products, 14,000; chemicals, 9,000; automobiles and their equipment, 6,700. There are no continuing data tabulated to show the location of women applicants according to their particular occupations grouped by industry, but samples for some States can be given.

The metal-factory work in which women job-seekers have experience includes work in rolling and stamping, and as machinists, filers and grinders, welders and flame-cutters, furnacemen and smelters, tinsmiths and coppersmiths, tool-makers and die sinkers, blacksmiths and forgers, molders and other foundry, machine-shop, and fabrication work, without doubt including assembling parts and inspecting for a perfect product, as must be done in most manufacture. In 8 important metal-working States, approxi-

mately 9,100 women are seeking jobs in these types of work.

Women Job Seekers and Defense Contracts.

Women's work undoubtedly is called for on many contracts for defense materials awarded to firms in New York, Pennsylvania, and New Jersey. In these three great Middle Atlantic industrial States nearly 3,000 women metal workers were seeking employment as long ago as the spring. Among the materials called for in contracts let in these States are supplies such as nuts and bolts, wire, steel rods, tube fillings; machines or tools such as lathes, cranes, pliers, drills, Diesel engines, milling machines, files; airplane parts such as axles, gears, engine parts; munitions such as bomb bodies, rifle parts, gun carriages, gun parts, ammunition boxes, and the machining of shells.

In three important Midwestern manufacturing States, Illinois, Michigan, and Ohio, 4,000 women experienced in metal work were on the rolls of employment offices. Many of the contracts let in these States call for supplies such as motor parts, valves, wheel and brake assemblies, aircraft engines and parts; for screw drivers and other small tools and for heavier machinery such as presses, locomotive or bridge cranes, tractors, forging machines, trucks, locomotives, teletype machines; and for munitions and army needs such as machine guns, practice bombs, gas-mask carriers, ammunition parts, cartridge containers, light tank hulls, and so forth.

In Connecticut and Massachusetts over 2,000 women were available for metal-work jobs of the types described. Contracts have been let to firms in these States for airplane parts, Diesel parts, tools and fixtures, boring machines, drop hammers, motorcycles, wire rope, pneumatic drills, cartridges, pistols, howitzers, machine-gun parts, ammunition, and so forth.

A similar story could be told of the electrical-supply industries, in which it is well known that

¹ From a special inventory of workers available in April 1940, by occupation and industry, made by the Bureau of Employment Security.

² Includes the factory office forces.

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women are especially adapted to many processes that they long have performed. Women are seeking jobs in the making of radios, electrical machinery and accessories, and miscellaneous electrical equipment. Over 9,000 women were available for such work in the nine States mentioned here, these being distributed as follows (in round numbers):

New Jersey, New York, Pennsylvania.....	4,300
Connecticut, Massachusetts, Rhode Island.....	1,900
Illinois, Michigan, Ohio.....	3,000

Various work is needed on contracts let in these States for electrical supplies. In the eastern group (including New England) such contracts call for receivers, cabinets, and head sets for radios, telephone switchboards, storage batteries, searchlight units, and lamp assemblies and mountings; and in the Midwestern States, transformers, generator sets, signals, X-ray outfits, and so forth.

Scientific and professional instruments are needed in the defense program in greater variety than ever before. For example, contracts let in New York, Pennsylvania, and New Jersey include requirements for aircraft clocks and cameras, elbow telescopes, height finders, timing apparatus, navigation watches, telescopes, and surgical instruments. These are products on which the work of trained women can be especially helpful. The manufacture of chemical goods and transportation equipment offers somewhat the same situation. In Illinois and Michigan more than 1,000 women seek jobs in transportation equipment, and in New York and New Jersey hundreds of women are in the market for jobs in chemical factories.

Training Needed by Women.

The training of women for manufacturing processes for which they are especially adaptable will be a major service to the National program. In bench work, using files, screw drivers, and other small tools, and sorting and assembling small parts, in the accurate inspections required to assure a perfect product, and in all finer types of work, women have a special facility. Processes newly performed by women in 1914-18, or engaged in by increased numbers of women, make an impressive list, even including, to a considerable extent, heavier work.³

Today's situation presents this difference—improved machinery and product involve additional fine and precise measurements. Few women already have the training necessary for types of inspection requiring, for example, measurements to thousandths of an inch; this requires a knowledge of how to read blue prints, and of some shop mathematics. Properly equipped women can do drafting-room work, tracing, drawing, operating machines that duplicate blue prints. Additional need for assignment clerks, record clerks, and so forth, can absorb more of the available office workers.

Women are found operating grinding machines and presses, single-spindle drills, multiple drill presses, and even sensitive drill presses. But in general women have not the necessary training in shop practice, and have not developed the special sensitiveness to differences in metals often required to prevent undue spoilage in certain machine processes. Major skills can be developed only within the industry or under actual factory conditions, but certain elementary basic training, including the use of hand tools, is being developed by N. Y. A. and C. C. C. courses. Only to an extremely limited extent is there any inclusion of womanpower in the National Defense Advisory Council training program that has operated through the Office of Education, using local vocational facilities, and with local school officials responsible for conducting classes.

Food, Apparel, and Service Needs.

Wearing apparel and food are as essential as munitions, and women job seekers who had experience in such production were as follows:⁴ Apparel and other articles made from finished fabrics, 92,000; textile-mill products, 86,600; food and kindred products, 62,000; leather and leather products, 24,000. Aside from manufacturing needs, a variety of other services will be required of women, especially if men are withdrawn from civilian services. Thus the following groups of women seeking work⁵ may be of particular importance: Medical and other health services, 14,000; telephone, telegraph, and related services, 11,000; regular government agencies, 13,000; service industries, 281,000;

³ See Woman's Bureau mimeograph: Increase in Woman Employment, 1914-18, and Occupations of Women in Defense Industries.

⁴ See footnotes 1 and 2, p. 3.

⁵ See footnote 1, p. 3.

trade, 244,000; finance, insurance, and real estate, 21,400.

More well-prepared registered nurses are needed than are available, according to the Nursing Council on National Defense recently formed by the various nursing organizations. Its purpose is to unify nursing activities, study nursing resources, and insure continuance of a high quality of nursing schools and services. The Council reports that in 1939, compared to 1938, over 1,800 more nurses graduated, but 458,000 more patients entered hospitals, 73,000 more babies were born in hospitals, and 2 million more persons subscribed to hospital insurance. In 1938, also, demand far outran supply, and 1,800

nurses were added to public-health agencies. Demands have increased in the Red Cross, United States Veterans' Administration, and Army Nurse Corps. The most pressing needs are in one-nurse rural areas, and teachers of public-health nursing also are sought. Warning is issued that adequate education should be secured by attending State-accredited schools. The National Organization for Public Health Nursing, sampling public health agencies, reported a small but constant increase in salaries of staff nurses in the 5 years 1934-38. Monthly salaries in the latter year were: Nonofficial agencies, \$128; combined agencies, \$132; health departments in counties, \$135, in cities, \$148.

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