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Curtiss-Wright Cadettes Material [Fayram] - Minnesota Technalog, Univ. of Minnesota Institute of Technology

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[[image]]

CURTISS-WRIGHT'S GIRL ENGINEERS

By Mary Jean Schaefer

That masculine domain-the engineering buildings-is no longer and exclusive haven for men. Brawny campus engineers are now sharing their tumbling classrooms and sacred hallways with 100 Curtiss-Wright cadettes. In the middle of February, an intensive 44-week training period began at the University for these cadettes, qualified college women coming from 22 states throughout the country, who were hired by the Curtiss-Wright Corporation to be specifically trained for important assignments in its many engineering departments. Similar programs of technical training are being offered by the engineering schools of six other colleges and universities-Iowa and Pennsylvania State Colleges, Cornell, Purdue and Texas Universities and the Rensselaer Polytechnic Institute-each giving instruction to 100 cadettes.

But-"What the hell!" you say. "Engineering is a man's field. It's no place for woman. Why encourage women to take this technical training?" The answer is obvious. The source of supply of engineers has been reduced to practically nothing. Something had to be done. Curtiss-Wright, like all of the other aircraft corporations, has annually hired a large number of graduating engineers and has trained them in the performance of their engineering duties. But 65 per cent of America's engineering graduates of June, 1942, went directly into active service. And figures show that 85 per cent of the present undergraduate engineers are in the enlisted reserves, leaving only 15 per cent for industry. Of the 12,000 engineers graduating each year, that means 1,800 technically trained men left for industry. The Curtiss-Wright Corporation alone needs 1,000 men annually. Something had to be done and Curtiss-Wright, through its cadette training program, is doing it!

To be eligible for this training, coeds were required to have completed successfully elementary college mathematics and to be in at least their sophomore year of college. Many of the cadettes were majoring in mathematics when they heard about the Curtiss-Wright course. Interviews were conducted by representatives of Curtiss-Wright at women's colleges and co-educational institutions throughout the country and final selections were based on the coed's scholastic record, the school's recommendation as to character, and the coed's interest in the type of work or desire to do something active toward helping win this war.

The cadettes are enrolled here as special students and are eligible for all the benefits available to regular students - medical care, recreational facilities, athletic activities, clubs and social events - but their heavy schedules, for the most part, rule out lounging at the Union and stomping at the twilights. They're in classes from 8:30 a.m. to 5:30 p.m. Monday through Friday and have Saturday classes till 12:30 p.m. Thirty-two hours of classwork, lab and shop work plus eight hours of supervised study doesn't leave much time for daytime extracurricular activities, as is true of any other job.

For the first 22 weeks of their training, the cadettes are taking courses in engineering mathematics, job terminology and specifications, elementary engineering mechanics and properties and processing of



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Right, aircraft drawing and design, the strength of materials, aircraft structural analysis and aircraft materials and testing. After intensively studying their intended courses, the cadettes will be assigned to Curtiss-Wright plants and to engineering jobs according to their qualifications and interest. Their subjects, depending upon the type of work they do, will range from 8:30 to 9:30 a.m. to 5:30 p.m. to 12:30 p.m. to 5:30 p.m.

How will the cadettes stand in relation to graduate engineers? Well, it's obvious that a year's training cannot prepare for the four-year engineering education previously required for a job in industry. It will suffice, however, in developing a large number of young women who can be expected to fill some of the temporary assignments so that the graduate engineers need not be promoted into more technical duties where they are so desperately needed, thereby providing greater utilization of total engineering personnel.

And what about the war, when there will be plenty of engineers for these aircraft jobs, what part will women play in aviation then? This program to use women for engineering positions is primarily for the duration, but aviation is being a new post-war era of expansion and growth. When that time comes, women and men alike will be evaluated upon individual performance and capability.

Many of these cadettes plan to go back to college to complete work for their degrees after the war. Many will marry. Others hope they will be able to continue in the engineering field. But with that time comes-work, but in a woman's war era, and by being Curtiss-Wright cadettes these women are doing their part for Victory.

THE MINNEAPOLIS TRIBUNE, April, 1942

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aircraft materials. Many of their classes are very similar to specific advanced training courses taken by engineering juniors and seniors. They'll go on with engineering mathematics in the second part of their training but their other courses will change. Instead they'll be studying the theory of flight, aircraft drawing and design, the strength of materials, aircraft structural analysis and aircraft materials and testing. After successfully completing their intensified courses, the cadettes will be assigned to Curtiss-Wright plants and to engineering jobs according to their qualifications and interest. Their salaries, depending upon the type of work they do, will range from \$130 to \$150 a month, based on a forty-hour week.

How will the cadettes stand in relationship to graduate engineers? Well, it's obvious that a year's training cannot substitute for the four-year engineering education previously required for a job in industry. It will suffice, however, in developing a large number of young women who can be expected to fill some of the first-job assignments so that the graduate engineers now in those positions can be promoted into more technical duties where they are so desperately needed, thereby providing greater utilization of total engineering personnel.

And after the war, when there will be plenty of engineers for those aircraft jobs, what part will women play in aviation then? This program to use women for engineering positions is primarily for the duration, but aviation is facing a new post-war era of expansion and service. When that time comes, women and men alike will be evaluated upon individual performance and capabilities.

Many of these cadettes plan to go back to college to complete work for their degrees after the war. Many will marry. Others hope they will be able to continue in the engineering field. But until that time comes - well, this is a women's war too, and by being Curtiss-Wright cadettes these coeds are doing their part for Victory.

The Minnesota Technologist, April, 1943

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