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## CURTISS AEROPLANE AND MOTOR CORPORATION



"CURTISAERO"

BUFFALO, U.S.A. Nov. 12th, 1918.

U. S. DEPARTMENT OF LABOR

Women in Industry Service

Washington, D. C.

To: Mary N. Winslow
From: J. W. Russell, Director of Training.
Subject: Women in Industry Service.

General aeroplane building, - divided in the following 1. occupational divisions.

#### METAL

Machine Wor	k	Bench Wo	ork	F:	inishing
a- Lathe b- Screw Machi c- Punch Press d- Milling Mac e- Drill Press f- Filing Mach g- Shaper h- Power Sewin	hine c- d- ine e- g h- i- j-	Copper Riv	Brazing Soldering ping Loing lering	b- c- d-	Enameling Plating Doping Varnishing Painting
	THE A	O D			

	Machine Work	Bench Work	Propeller
b- c- d-	Band Saw Rip Saw Sticker Nailing (Mach.) Belt Sanders Trimming Mach.	a- Hand Routers b- Gluers c- Nailers d- Markers e- Sanders f- Blockers	a- Hand formers b- Copper Tippers c- Glueing d- Filling e- Varnishing f- Finishing

#### Assembling

Panel
Fuselage
Aileron
Elevators
Rudder
Hull Cover
Final Wing
Final Small Parts
Shipping

### Special

Timekeepers
Metal Inspectors
Wood Inspectors
Tracers
Typists
Factory Clerks

2. We train females for all the numerous activities enumerated above. To take these in detail would require a great amount of time. However, we will endeavor to explain a few below.

(a) Panel or wing assembling.

(b) Process.

- 1. The two beams are laid side by side about four feet apart on a jack; the webs (nose center-and-tail) are then "strung" and fastened with screws, nails and glue in their proper places, designated by the blue print; the guide wires are later strung throughout the general structure, gauges and forms being used to ascertain the accuracy of the assembled panel.
- 2. Blue print reading.

  Some 25 lessons are used covering sketching, originating third view from two views given, applied mathematics, use of measuring instruments, such as micrometer, bevel protractor, scales, etc.
- 3. Women operate the regular types of machines used formerly by men. In some cases attachments are added, not because a woman is the operative, but to facilitate more rapid production.
- Trainees receive 25% per hour while learning. Upon promotion from training 27½% per hour, increasing when up to production to 30% and 35% an hour, and advancing in relative proportion to rates paid to men for equal amount of work performed, viz.: If a woman does 75% the amount of work produced by a man, she is paid pro rata.
- 5. Pictures from this plant must pass censor. Write Fay S. Faurote, care of this Corporation for same.

Jours H. Jusell

P.S. I have an article on "Training Women to Build the Aeroplane", which you could use to adventage when publishing pictures.

JWR:EL

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November 1,1918. Mr. J.W. Russell, Director of Training. Curtiss Aeroplane Corporation, Buffalo, New York. My dear Mr. Russell: The Woman in Industry Service is planning to conduct an educational campaign on the subject of standards of work for women. We are particularly interested in the training and substitution of women for men in industrial processes. If you could send us any facts, individual instances or statistics on the following subjects from your experiences in the Training Department we will be very grateful; In what processes have you been able to substitute women for men? Can you give us two or three examples of the training given women before they take over the job formerly done by men? Can you give us examples of adjustments of machinery or methods of work that have been made in substituting women, Do women receive the same pay when they perform the same work formerly done by men? If not, can you tellus the reason? Can you send us any pictures of the women working in your plant, or can you tell us where we could secure them for our use? Thanking you in advance for anything you may be able to do for us. Very sincerely yours, Mary N. Winslow, WOMEN IN INDUSTRY SERVICE. MNW-F igitized for FRASER tps://fraser.stlouisfed.org

CHANGEN OF

September 12, 1918.

My dear Mr. Miles:

I write at the request of Miss Van Kleeck to acknowledge receipt of your letter of August 30th, and to thank you for the reports which you have sent on training in the textile industries. Miss Van Kleeck will be glad to take the matter up with you later.

Very truly yours,

Secretary to Miss Van Kleeck.

Mr. H. M. Miles, Chairman, Section on Industrial Training for the War Emergency, Advisory Commission, Council of National Defense, Washington, D. C.

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Federal Reserve Bank of St. Louis

# SECTION ON INDUSTRIAL TRAINING FOR THE WAR EMERGENCY OF THE

#### COMMITTEE ON WELFARE WORK

L. A. COOLIDGE, CHAIRMAN

ADVISORY COMMISSION, COUNCIL OF NATIONAL DEFENSE WASHINGTON, D. C.

August 30, 1918.

Miss Mary Van Kleeck, Women in Industry Service, Department of Labor, Roon 604 Ouray Building, Washington, D.C.

Dear Miss Van kleeck:

In the matter of the Textile Industries, I have several letters from companies on training and betterment work, and shall be glad to submit them to you and to take up the matter of textiles as a whole whenever you wish. It has been impossible for this Section to do so as yet, principally because the field for action in that trade is very limited (although it is none the less important) and we have had to specialize in the machine trades.

Brighton Mills, Passaic, New Jersey, are about the best I know of from report; I have not seen them.

I am enclosing herewith copy of their statement on Training and Welfare; also copy of a statement from Mr. J. W. Price, 76 West 6th Street, Lowell, Mass.

Very truly yours,

Chairman.

winly

HEM/B.

Encls.

76 West 6th Street Lowell, Mass. August 2, 1918

Mr. H. E. Miles

Dear Sir:

If I were in charge of training help in a cotton mill, my plan of proceedure would be as follows:

I would pick out a trained operator on any unit in the mill, give him or her as the case might be, one or two weeks of the right kimi of training in the art of teaching. Then this operator would be able to go back to that unit, train green help, and also keep up production. This would appeal to the mill agents. The part your department could play in this would be to have a man place it before the agents of mills, and then train the operators to become teachers.

This, to my mind, is the only way that training can be carried on for a textile mill.

I have read of the vestibule school and no doubt it has worked out with good success when the units are small, but let us take a card room in a mill and say we wish to train operators for it.

space of 55 feet wide and 15 feet in depth. Then we have a man tending 16 cards; this means a floor space of 50 X 45 feet. Then there are drawing shelves, and fly frames; that would mean a building 151 X 45 feet; also the fact of buying the machinery and its cost. So you see I have given you, in the beginning, the only way which I find is the best way to train help in a textile mill.

Will be glad to hear more from you and do anything I can to help out this work.

Yours truly, (Signed) P. H. Price The Plan by Which New Workers are Trained at Brighton Mills, Passaic, N. J.

In a textile mill most of the operations are unskilled or semi-skilled, and a worker who is considered efficient must be able (1) to operate power-driven machinery, (2) to keep the machine supplied with material on which to work, (3) to remove the finished product, (4) to keep the machine as free from lint and dirt as possible, and (5) to prevent or correct defects. Quality and production are the inseparable aims of all effort, and a minimum of waste is an essential of profitable production.

The supply of labor for textile mills has been obtained previously in the time-honored fashion of "stealing" from similar mills and when necessary putting an untrained recruit on a frame with a trained worker or near one. Here the learner got what he could be observations, supplemented by the instruction the worker was able or felt inclined to give. In case there was relationship or friendship between worker and learner this method proved successful to the limit of the worker's ability to impart, and his knowledge of the best methods. But such instruction takes the time and attention of a worker whose wage depends on his production, both amount and quality.

It is working a hardship to the operative to ask him to break in the new worker and of course wrong practices are perpetuated in this way.

When the problem is complicated by the need of training many new operatives, it seems advisable to put these beginners in groups by themselves with an excellent worker of each department in charge as teacher. As a teacher, she is not concerned with production for herself, and so can give her whole attention and effort to the training of the learners in her school.

Since the conditions in Brighton Mills did not allow for a separate training room, or "vestibule school", as it is called, the training pakes place in each department on a group of machines, designated the "school". For these

schools, teachers were chosen who had records of successful and responsible performance of operations, and possessed the ability to give their knowledge to others. They are paid the highest rate they ever received as workers, and in addition, a substantial bonus for each learner who makes good in her first month as a regular worker.

Most of the skilled operations in the mill are now being done by women, and they are the learners in the schools for the most part. They are hired by the labor department and assigned to the schools as they request or seem physically qualified. A small girl can not handle a loom, or a large girl do well at spooling.

When they are first put into the schools they are under the close supervision of the teacher. Here they are taught to operate their machines and are trained in skilled hand motions until the habit of correct practices is well formed and a standard of quality is established.

When the teacher decides that only practice is needed to develop skill and speed, she arranges with the foreman to put the learner on machines in the department where workers have left or are absent. The learner's production is measured now, and she is paid by the learner bonus plan explained later.

The nature of the operation being learned makes the first period longer for some jobs than for others. Winding, for instance, does not require a long period of instruction, while both twisting and weaving are learned only after weeks of instruction.

In the <u>carding room</u>, there are two teachers, one for all processes from pickers to draw frames, and one for slubbers, intermediates and fine frames. The teacher of the first group does not have a separate school but gives instructions to beginners on these machines and watches their methods and progress until they are able to do the job well.

Learners for <u>fly frames</u> are first trained as doffers under the direction of the teacher. The best of these are chosen for instruction on a machine as soon as there is a vacancy. Instruction and practice are inseparable here and the production record of the learner is credited to her as soon as she tends the machine without the teacher's aid.

In the <u>spinning department</u>, the teacher has six or eight sides on which she may train her learners during the week or two in which they acquire dexterity in piecing ends and cleaning rollers. The plan here allows the very newest learners to work together on two or three sides until they are over the first awkwardness. Then they are given one side each to be responsible for. Each one, at her own pace, can progress through stages of two and three side positions, until she is ready for four sides. She is then given a four side position in the department for eight days, and if she is able to keep up the ends and keep the machine clean, she is graduated as a regular worker.

In the spooling department, a similar graded responsibility is allowed the beginner who is expected to keep up ends on only four to ten spindles during the first day while she is learning to use the Barber-Colman knotter, and to find loose ends quickly. She can tend 15 spindles the second day and perhaps 25 by the end of a week. In another week 35 spindles will increase her speed and when her production shows she capuld handle 50 spindles or a full worker position, she is allowed to try it. For eight days she must accomplish the same amount expected of workers, before she can be considered a regular worker.

In the <u>warping department</u>, teacher and learner work on one machine for two or three days, and then the teacher leaves the learner to operate it herself, while the teacher starts another learner or works at a machine nearby. The learner knows she is to call on the teacher for help or information, but feels pride in her ability to run the machine herself. Her production is credited to her as soon as she assumes responsibility for a machine and her progress is

shown by the graded bonus system.

In the <u>winding department</u>, a day of instruction and a week or two of supervision and encouragement under the graded bonus system are usually enough to train beginners.

Usually two or three weeks of general work on all frames in a school section must precede the assignment of a learner to one machine. The learner is still under the supervision of the teacher until she has made Grade 4 eight times.

Learners in the weaving department, are trained in a similar manner, and require about the same length of time for instruction and practice.

The departments named are the largest in the mills, and have need of most new workers in a year. The few learners in the other departments are trained by regular workers and the foreman.

To explain clearly the graded bonus system introduced to encourage learners, it is necessary to state the principle of scientific management by which the task and bonus system works in these mills. A "task" or assignment for a day's work is very carefully estimated. If the worker accomplishes this amount, he receives a percent of his day's pay in addition to it. If he does more than the task, the percent is taken on that larger output, and the bonus is correspondingly larger.

During the time the learner is received instruction, and practicing on the school machines, she receives a flat rate of daily pay. This pay is not the same for learners on all operations, but is the regular flat rate pay which any worker, who did not make bonus on the operation, would receive. As soon as the learner is assigned to a machine, her production and its quality are credited to her. To encourage her at this time, since she would find it hard to come up to the bonus requirements at first, a graded task scheme was worked out with smaller bonus percents, also graded to correspond with the tasks.

Without going into details and figures, the first grade task is considered made if the learner does about 70% of the regular task, and a Grade 1 bonus of one-fourth the full percent is added to the day's pay. Grade 2 task is 80% of the full task and, when earned, brings the worker one-half the full percent on the day's pay. Grade 3 is 90% and the bonus for it is three-quarters of the full percent. Grade 4 is the regular task and can be exceeded by the learner as it is by the worker. The learner then receives the full bonus percent on the work done.

(The above in table form)

Grade 1 task is 70% of full task and earns 1/4 full bonus.

Grade 2 " " 80% " " " " 1/2 " "

Grade 3 " " 90% " " " " " 3/4 " "

Grade 4 " " the " " " the " '

About a week for each grade would be a fair allowance for most learners and most operations, but many will skip whole grades and get to grade 4 almost immediately. This grade (which is proof the learner can meet requirements set for workers) must be reached eight times while the learner remains in the school, before he is graduated into the department as a worker. If the full task is made eight times there is little danger that the learner will make a poor worker in the department.

An allowance of five weeks is considered long enough for the average learner under the above conditions. Lack of machines at which to put learners who are ready to try the graded tasks, may keep some in the schools longer than is necessary. Others will show themselves content to stay on the flat rate or getting the small bonuses of the graded tasks. This may be accounted for by two facts: (1) If the learners are young girls, they may have to give all their money to their parents; (2) the learners may be mentally or physically incapable of meeting the requirements of the operations.

Some reward, attractive to such girls, will have to be offered to get effort and interest from the first group. In one department, made up mostly of young girls, the bonus requirement can be met by the quick attentive girls as early as 3:30 or 4 o'clock. These girls are then allowed to go home if they do not wish to do more than the task. In these hot days the department is almost deserted by 4:30 each day. But here the work is largely hand work. In other departments the machines must run the full number of hours to keep up the supply of material for departments dependent on it.

The matter of deficient ability, however, is a mistake in hiring or placing. At the present time there is a tendency to take anyone who applies, in an effort to prevent vacancies. But there is a likelihood that people out of work at this time may have proved themselves updesirable elsewhere, or are the kind who do not make good on a job or stick to it. Any mill or factory desiring to maintain its standard or to place these newcomers where they will not have too much required of them, must devise some way to determine the ability of the applicants and to place them wisely, even though the mill does plan to train them.

In accordance with the plan at Brighton Mills, the learner is a member of the school, under the supervision of the teacher, but not at the disposal of the foreman, until she has completed the course of instruction and proved her ability to meet the regular bonus requirement. Very careful daily records of the work of all learners is kept and closely followed by the Educational Director, who informs the foreman when the learner is ready to graduate into the department.

During the first week when the learner is in the school, she is notified to attend a class for beginners in which she is told the story of cotton and shown the cotton in its various processes through the mills. Her work in the

-7-

whole plan is explained and she is shown the machines and operatives who use her output. Samples of the mills' cloth are shown and their use illustrated by pictures and samples. The uses of the government stuff are made as definite as possible. An exhibit of defects is shown her, also samples of waste and their small value in comparison with the equal weight of cloth. Learners seem interested in this instruction, with the samples and pictures.

The class is conducted by the Educational Director at present, who plans to enlarge the scope of this instruction to include instruction of a more general nature, to include lessons in English if necessary, in reading, writing and simple arithmetic. The details of this scheme will fit into any plan for Americanization.

During this first week it might be found possible to give simple tests that would show the ability of the learner or her incapacity for learning the job assigned to her, or any job in the mill.

In the class period, the mill policy and standards can be explained, the right attitude developed toward quality and waste of all kinds. Questions can be encouraged and difficulties settled, if any have arisen.

The question of turnover is closely related to any plan for learners, and is largely concerned with the interest and contentment of beginners. It is desirable to tell the learner truthfully the rate of pay she will get while a learner, as well as to let her know what other operatives at the same work can earn after six months or a year of experience. When the learner or worker is leaving - "quitting" - it is advisable to get the reason for her going. and sometimes a transfer is possible from one department to another, from one kind of work to another, less difficult or more suitable.

> (Signed) Elizabeth W. McKee Educational Director.

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The necessity for training additional workers and for introducing women into the work in the industries is acute and will become even more so when the new draft shall have been applied, which will be within a fery few weeks, possibly half a million men will be taken into the service in the next three months, and between two and three million in the next nins months. This, in spite of the application of all possible means directed toward a minimum of interference with the industries, will necessarily result in largely depleting the available supply of workers, and will demand the creation of new workers and the placing of them in the industries. And the training work must be begun at once in order to be of any real use.

The success of the whole plan, and of any plan that could be devised, is, of course, absolutely dependent upon the development of an efficient and complete administration, in order to collect the necessary facts as to demands and supply, and to enforce the plans for training and for placing the necessary men and women in the industries.

The Division of Training and Dilution has an appropriation of only \$150,000, which is entirely inadequate for its work, unless use is made of the other existing agencies in the manner outlined above. Even then the appropriation may well prove not to be sufficient, but it is believed that, if results are largely and promptly shown by training and by the induction of women into the industries to meet the imaediate urgent demands, sufficient funds will be made available for the proper prosecution of the work.

Mr. Eyerly approves of the foregoing so far as concerne training for industries, but will desire to take up with the War Labor Policies

Board some further consideration and plans directed specifically toward

September 26, 1918. SUGGESTED DRAFT OF LETTER TO BE SENT OUT OVER THE SIGNATURE OF THE SECRETARY OF LABOR Dr. William McAndrew. Acting Superintendent of Schools, Department of Education, New York, N. Y. My dear Dr. McAndrew: You have asked for our opinion as to the desirability of opening trade classes to women which in the past have been organized for men only, and you point out that you are receiving applications from women for instruction not hitherto provided for them, and that you have vacancies in the classes of the men's trade schools. It is certainly clear that as the war goes on women are needed in increasing numbers in occupations to thich they have not hitherto been accustomed. Preliminary training is very desirable if these women are to meet the new demands successfully. Decision as to opening courses should depend upon whether the work and its conditions are such as to be healthful for women besides offering opportunities for training. If these opportunities exist, as they undoubtedly do in the city of New York, the Department of Education will be rendering a public service both to the women and to the war industries if it makes available\_thery possible chance for training for women both in day and evening schools. The organization of separate classes for women would obviously be an unnecessary expense and a policy of doubtful ivisdom, especially as men and women are working together in the industries. Sincerely yours, Secretary. Department of Labor. igitized for FRASER tps://fraser.stlouisfed.org

September 12, 1918. My dear Mr. Wilhelm: Since talking with you about the publication of an article centering around the training of women workers, there have been developments in my relation to that subject, especially my appointment on an important committee which is considerint it, which would make it impossible for me to write an article on it at this time. I am very sorry to have to change the arrangement, but you will recognize that in an official position none cannot be in a position of making public use of material at all times. Under the circumstances I think it better to adopt the original plan whereby I will make suggestions to you, but the article should be written by you. Sincerely yours,

> Mary Van Kleeck, Director, Woman in Industry Service.

Mr. Donald Wilhelm, Cosmos Club, Washington, D. C.

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The mistake in your and Miss Anderson's joint letter to Mr. Johnston was corrected by hand by Miss Anderson before mailing.

You discovered the mistake in the carbon copy-not having seen the original. Carbon now corrected

A.F.L.

Copy INTERNATIONAL ASSOCIATION OF MACHINISTS Washington D.C. July 15. 1918 Miss Mary Van Kleeck In Charge of Women's Branch Miss Mary Anderson Supervisor in Women's Branch My dear Misses Van Kleeck and Anderson: This is to acknowledge your letter dated July 6, relative to the problems presented in the plans for training women workers for industrial service, contents of which have been read with much interest. In reply beg to say, I have written to our business representative. Mr. Kelton, Philadelphia, Pa., in order to secure from him some additional details in connection with the plans which are being promulgated by Mr. Miles, and also, requesting an expression of opinion from him regrading this subject. As soon as I receive further data I shall be very glad to discuss this question with you again. With kind regards, I remain. Very truly yours, (Signed) Wm.H. Johnston International President. igitized for FRASER tps://fraser.stlouisfed.org

Training. U. S. DEPARTMENT OF LABOR MUS SEMPLOYMENT SERVICE WASHINGTON IN ANSWERING REFER TO July 30, 1918. No. Miss Mary Van Kleck, Director, Woman in Industry Service, Department of Labor, Washington, D. C. Dear Madam: Mr. Clayton has directed that the attached memoranda be sent to you, thinking that they may be of interest. Very truly yours, Inplansler Private Secretary. igitized for FRASER tps://fraser.stlouisfed.org

colleges to instruct women workers in the use of implements and elementary essentials of branches of work on Land

Training to be furnished free of charge, following the precedent set by the British Government, by Agricultural Colleges and Institutes. to render women fit to undertake certain branches of Agricultural and rarm, this year, to familiarise them with the use of implements and handling machinery, and give elementary knowledge of various branches of work, in order to win the confidence of the Farmers and equip them efficiently for performing their labour. In view of the lateness of the date, it is suggested that prompt arrangements should be made by Colleges and Agricultural Training Centres, to provide throughout the country, short practical courses of Instruction and demonstration, accompanied by field work and practise on the part of the women and girls to cover management of horses, care of stock, rezing of poultry with egg production, raising of vegetables and fruits, dairy work; in creameries, butter cheese casein making, bottling preserving canning of perishable food stuffs, poultry game fish, driving of tractors, and training in handling and generally running of Farm machinery.

The training arrangements to cover;—

1. Provision of short special courses of Instruction, demonstration and field work at agricultural Colleges and Training Centres.

2. Sending out of special Instructors to particular districts where women can be massed in large groups for instruction a practice Furnishing special Instructors to somens aducational Centres, where ordinarily no training in Agricultural and Farm work is given.

3. Taking advantge of facillities offered by Experimental Farms public Parksetc. to add to the number of centres where training can be furnished.

The training will not only enable girls and women to test their ability for the work, but will also test their physical fitness and strength, thereby safeguarding against physical breakdown or injury after work on Farms or in other branches of work has started.

Arrangements for securing suitable girls and women to take the training to be organised through the Womens Division of the U.S. Employment Service, in cooperation with State Committees of the National Council of Defence, Womens Colleges, Educational Centres public schools, and public Associations of Wommen throughout the States.

Girls and Women to be trainined in the several states in accordance with the rural Industries operated within them, and in consinance with Agriculture requirements and shortage of man power. The dislocation and uprooting of women by unnecessarily moving them about to be rigorously avoided.

Signed

Memorandum on the Provision of a Supply of Womens Labour for the lighter branches of Agriculture and Farm Work to supplement Man Power and effectively increase production of a larger Food Supply.

Necessity for Mobilisation.

The diminished rate of Food Production amongst the Allied Nations and seriously lessened food supply owing to inclement weather. Great Britains food supply last year was considerably less than anticipated, owing to a poor harvest caused by weather conditions; French crops were fifty per cent below normal, and the Italian yield was poor.

Australia's grain yield for this year is nearly 19 million bushels short, and owing to bad weather and lack of sufficient Farm Labour, there was also a shortage in Canada.

Submarine sinkings and incendiary fires caused by enemy aliens have also depleted food stocks.

Lord Rhondda, British Food Controller, on behalf of Grt Britain, France and Italy, has just sent the U.S.A. an urgent appeal for immediate larger food supplies for this years consumption, as owing to increasing scarcity of staple articles of food, British rationing has again been decreased in amount; the French have also cut down their bread rations. David Lubin, U.S.A. expert representative on the International Institute of Agriculture, has just issued a public statement decaring that Europe's crops this year will be smaller than last year, that the Allies depend on the U.S.A. for the bulk of this year's food, and that extraordinary measures must be adopted in America to meet the situation, i.e. placing new large areas of land under cultivation, and the mobilisation of women for Agricultural work of all kinds.

A Deputation representing two million American Farmers is arranging to meet the President to present the serious situation and

A Deputation representing two million American Farmers is arranging to meet the President to present the serious situation and the gravity of the Labour shortage, as there is great danger not only will be ops be smaller than last year, but much less land will be under production, and farmers will be forced to dispose of their live stock

Precedents for Mobilisation of Woman's Labour for Land work.

In Grt Britain, last year, 258,300 women were employed on the land by the Government in all capacities, the number for this year is being largely increased; the Government is now training women to drive Farm tractors; the prejudices and opposition of the Farmers has disappeared, the health of the women workers shows no trace of strain or impairment. In France and Italy, women are undertaking both the heavy and light branches of Farm and Agricultural work, with the aid of a few old men.

In theemergency demand for farm labour last year in Canada, women of all classes rose to the occasion and volunteered in large numbers for work on the ladn, acquitting themselves successfully.

Under the auspices of Vassar College, and the Womens Land Council, an experiment was tried with units of women workers on the land at Vassar Farm, -the Mt Kisco and Bedford Village Agricultural Camps, and through small units for fruit picking.

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These demonstration lessons as to the adaptability and efficiency of American women as workers on the land, proved very satisfactory, Testimony has been given publicly by Mr Curtis of Westchest Farm Bureau, by Mr James Wood President of the Bedford Farmers Club, Mr Ghent of the Orchard fruit farm, and many other as to the practical ability and success of the women working on the various farms. there are many dependents for an increased number of women for work this year.

Throughout other protions of the country, women have proved their desire and ability to perform work on the land of various kinds. Title of proposed Woems organisation

The U.S, A. Womens Land Corp.

Administration

Under the supervision of the Woemsns Division of the U.S.A. Employment Service, assisted by Divionsal Commandants for subdivied zones. Their salaries to be paid through funds raised locally.

A minumum wage to be fixed by the U.S.A. Department of Labour. The Divisional Commandants to be thoroughly trained expert women All candidates for enrolment in the U.S.A. Womens Land Corp must be medically examined as to physical fitness before being

accepted
The National Land Corp will furnish labour for the following
Branches of Agriculture and Farm work
Dairying. Butter cheese casein making; work in many of the
5,000 creameries.

Care of live stock. Milking by hand or machine.

Poultry farming and Egg production; there one and a half million farms in the U.S.A. producing no poultry or eggs.

fowls, turkeys, geese

Pig rearing.
Fruitgrowing, large and small; picking packing grading.
Market gzrdening truck raising. including potatoes, and beets
for sugar.

Fruit and vegetable canning, drying, canning bottling.
Canning of fish, poultry game.
Lighter forms of farm work such as; - planting, transplanting, cultivating, thinning, weeding, hoeing, mowing, with machine, hay raking and pitching, shocking of grain, fence making, etc.
Recruiting for the Corp.

The members of the Corp will be drawn from women of the leisured classes, College students, professional workers, trade union and seasonal working girls and women, and can be recruited through Wommns Colleges, Womens State Committees of the National Council of Defence, Local Councils of Women, the Mother Union, Rural Community Clubs, Womens Trade Union and Labour organisations.

All registration of Land workers to be effected through the U.S.A. Employment Service and Womens Committees of the National Council of Defence.

Training Arrangements.

Afrangements for preliminary training in use of implements and elementary work to be carried out through Universities, State Agricultural Colleges, Womens Colleges, with the igitized for FRASERCOLLaboration of the Federal and State Agricultural Departments. ttps://fraser.stlouisfet.ggtruction to be furnished free of charge, following the

Competent Instructors and Demonstrators to also be furnished to Camp units. All instruction to be furnished free of charge, following the precedent set by the British Government. To avert unnecessary dislocation and moving of Womens Labour about the country, efforts shall be made to train women and use their labour strictly in consonance with the Agricultural Industries carried on within the several zones and subdivisions throughout the country. Where unsuited to local agricultural conditions, no women shall be employed. Strict attention shall be paid to the accommodation provided and to general housing and sanitary arrangements. Where Labour conditions demand massing of large groups of workers in particular districts, during the Summer and Fall months, Camps shall be formed with qualified Captains in charge of the units, who shall be responsible for arrangements connected with the administration of the Camps and the arrangements for the labour of the women workers. A uniform of bloomers and Overalls with a distinguishing bage

to be adopted.

Employers cooperation.

To avert prejudice and opposition, and secure the intelligent cooperation of Employers, of every kind, with the cooperation of Mr Creels publicity Committee, information shall be disseminated broadcast amongst National Farmers organisations, State Agricultural and Horticultural Societies, and Granges, as to the nature and practical utility of the Womens National Land Corp.

The cooperation shall also be secured of the Farm Management Bureau, Office of Markers and Production, and Farm Bureaux To increase efficiency elasticity and promptness in meeting requirements in outlying rural districts, the cooperation of the

Post office Department should be secured -

Immediate steps shall be taken to put the above organisation in operation in readyness for the Agricultural and Farming requirements of the Nation in securing an ample food supply for home consumption as well as for distribution to the Allied Nations.

Date. Jan: 26. 1918.

SUGGESTIONS FOR PROCEDURE
FOR
COMMITTEE ON WOMEN IN INDUSTRY

PROMOTE TRAINING FOR WOMEN IN WAR INDUSTRIES

1. Short general survey within the next two or
three weeks of training schemes for women workers in force
in plants, schools and private organizations, etc.

2. Conferences at the same time with persons interested in training women workers in New York, Philadelphia, and other cities to discuss plans for a concerted centralized campaign to promote training for women workers in the war industries.

3. Calling a conference in Washington early in September of interested persons to discuss:

(a) Women's entrance into industry and

Present methods of induction;
 mportance of more adequate training;

(a) Technical training for women in skilled occupations to uphold existing wage scale;

(b) General intelligence training to secure greater accuracy in product and safety for the user;

(3) And most important of all - to make the woman a skilled, independent and intelligent worker.

(b) Need for training as seen in the U. S.

Employment Service;

(c) Types of war emergency classes established this summer and lessons learned from them:

(d) New types of schools and classes needed to

(e) Appointment of a special committee to formulate

properly equip women workers in the industries;

a program to promote such classes;

M E M O R A N D U M
ON THE SUGGESTION THAT THE
COMMITTEE ON WOMEN IN INDUSTRY
DEVELOP A PROGRAM FOR
VOCATIONAL TRAINING IN THE WAR INDUSTRIES

The suggestion that the Committee on Women in Industry develop a program for vocational training in the industries involves several important considerations:

- 1. Training is not a distinct and abstract subject which can be worked out along general lines outside the industry.
- 2. Programs for training necessitate intimate and first hand knowledge of the industry. The persons who develop such a program must visit and study carefully:
  - (a) Processes
  - (b) Steps of advancement
  - (c) Machines and their requirements on the worker;
  - (d) Technical knowledge required to set up and run the machine;
  - (e) Type of skill required;
  - (f) Kind of supplementary knowledge or training which would increase the intelligence or efficiency of the worker;
  - (g) methods of production;
  - (h) Working conditions.
- The persons who are allowed to spend the time necessary to become adequately inform ed on these points must be able to show:

1. The Federal Board for Vocational Education;

2. The Training and Dilution Service of the Department of Labor:

3. The Miles' Committee of the Council of National Defense on the Training of Workers for the War Emergency;

4. The women agents in the Industrial Service Section of the Ordnance Department;

5. The New York Clearing House and War Organizations in New York:

6. The Philadelphia Women's Committee of the Council of National Defense through the War Emergency Summer High School.

7. The Young Men's Christian Association;

8. The Young Women's Christian Association.

These considerations raise the questions:

(a) What is the position of the Committee on

Women in Industry: By whose authority do we go into the industries as a subdivision of the Committee on Labor of the Council of National

Defense or as a Committee of the Department of Labor? Who shall decide
into what industries we go?

(b) Who shall decide into what industries we go?

(c) Shall we go into the industries which are under

3.

(5) To weigh, discuss and criticize the suggestions presented in such a conference as to methods of training women; (6) To determine on a sound basis for pushing the program agreed upon. Summarizing: GRANTED 1. That women are entering into all kinds of new occupations; both skilled and unskilled, with but little understanding of the technical knowledge involved in the skilled occupation; with but little opportunity to acquire this background and with little appreciation of the importance of accuracy and responsibility in the monotonous repetitive processes: 2. That such training for women in the Industries is at present not being done adequately by any of the agencies designated to do it: 3. That such training should be given the women workers: WHAT IS THE MEANS OF ACCOMPLISHING THIS END? 1. By heading up all the various organizations and agencies and working out together a common policy? 2. By launching under the direction of the Committee on Women in Industry, in co-operation with these agencies, a program for training women for the war industries? igitized for FRASER tps://fraser.stlouisfed.org

4.

#### SECTION ON INDUSTRIAL TRAINING FOR THE WAR EMERGENCY.

EXECUTIVE COMMITTEE OF SECTION Percy S. Straus, Chairman John Golden H. E. Miles, Chairman C. R. Dooley

107 Council of National Defense Building, D St. Near 17th, N.W.

Washington, D. C.

#### HOW-TO-START-TRAINING-IN-A-FACTORY

As Developed in the Curtiss Aeroplane Company, Buffalo, N. Y. but Applicable to Any Industry by Frank L. Glynn \*

ESTABLISHMENT.

Survey of Plant by Conference General Manager. Plant Manager Assistant Plant Manager. Breakdown from Pay Roll showing relative importance of departments. Note: This latter method requires even a more definite control by the training director than the other two, as the training identification is likely to be lost and importance become insignificant. This method is least satisfactory and should be resorted to only in exceptional cases.

#### ORGANIZATION.

Director of Training Reports to General Manager as to policies Plant Manager and Assistant as to operation.

#### LOCATION

1. Separate floor space in Factory about 60 x 200 ft. For the location of such activities as could well be brought

together as a separate training

unit.

- 2. Separate floor space in departments, the training for which had best be kept in department.
- 3. "Tagging" of machine or other shop units for training identification when it is necessary to distribute school throughout department and have instructor circulate.

#### EQUIPMENT.

The equipment was transferred from the regular production departments to the training department.

Note: At first there is likely to be objection to this on the part of superintendents and foremen, but it can readily be seen that machines and appliances must be furnished by them anyway under the usual method of breaking in help.

No difficulty, however, of this sort was experienced, as those in the Curtiss Company fostered and helped the establishment of the work in every way.

#### DEPARTMENTS OF TRAINING

NOTE: These fluctuated from week to week according to the needs of the production manager based on development or changes in production.

\* Mr. Glynn inaugurated and developed the Curtiss Training work and is now with the Training and Dilution Service, U.S. Dept. of Labor, 604 - G St., Washington, D. C.

Each month, however, the employment office furnished the training department with an estimate of the help which would probably be required for the two ensuing months.

This formed a basis for the training department to work on, as to the numbers and kind of training to be emphasized during that period, and resolved itself into the employment office giving the training department an order for help, and the employment manager was only too pleased to cooperate in every way.

The departments which have been operative thus far are:

1. Machine Work

Screw Machine Milling

> Hand Feed Power Feed

Drilling

Single Spindle
Double Spindle

Shaper Punch Press Lathe

- 2. Filing
  Hand
  Machine
- 3. Drill Grinding
- 4. Tool Crib
- 5. Cable Work
  Wrapping
  Splicing
  Dipping
  Soldering
- 6. Sheet Motal
  Riveting
  Soldering
- 7. Propellor Work
  Shaping
  Tipping
  Brass
  Copper
  Linen

- 8. Acetylene and Other Gas
  Welding
  Brazing
  Soldering
- 9. Woodworking
  Strut Work
  Beam Work
  Panel Work
  Wing Float
- 10. Doping
- 11. Final Wing Assembly
- 12. Sewing
  Panel Covering
  Power Machine

#### DEPARTMENTAL RELATIONS

1. Employment Office.

Mept the training department filled to its capacity, drew the trained people from the training department, placed them on production in the factory for which they were trained, and maintained close daily contact with the training department through exchange of daily reports.

It is necessary for the employment office to keep the training department moving.

2. Time Keeping.

The record of attendance, punctuality and time of all persons in training was reported daily to plant manager and training director by the regular time clerk.

3. Accounting.

Rendered to the training director a weekly report as to cost of salvage, expense, wages of learners, instruction, supervision and administration.

Note: A sample sheet of weekly report may be found herewith page 7.

#### MANAGEMENT.

The training director rendered a daily and weekly report to the management summarizing operation of training department, embodying number received, rejected, promoted, returned, and entire operating cost of department.

#### OPERATION

#### Instructors.

The instructors were preferably those taken from the actual production floor. Experiments were made with persons having had teacher's training and experience in teaching activities closely related to the Curtiss work. They were employed by the training department and first put on production until they were thoroughly familiar with the work. when they were taken over for actual instruction.

It was found that their sense of production was low and that they approached training largely from an academic point of view - that they taught more of the construction of fibre than of parts, and approached the problem as "getting training and education out of production," rather than getting "production out of training."

It is strongly recommended that the most practical type of person be employed, with factory experience as a background - providing, of course, that he or she is amenable to suggestion, has the pro- would like to be trained. per point of view, personality and ability to to not only "do the joh" but also "to impart the information" and eliminate all mystery.

We found no difficulty in finding an abundance of highly qualified instructors employed in the various shops on an hourly basis, They were the exceptional persons and occasionally we were mistaken in judgment. For instance, we found that a graduate of a foremost technical college, who was an excellent producer, lacked teaching ability, apparently endeavoring to do the work of ten people

instead of having the ten persons do it under instruction. another operative was employed as instructor upon the high recommendation of a foreman who wanted to get rid of him and disliked to take him back even as a workman.

These were exceptional cases and were quickly remedied by the selection of other operatives who more than made good.

The difficulty lies not with instructors but with obtaining directors for original layout of plan and organization which can be done in from one to three days, with the later general direction left to the production manager of the factory and the operation of the training department to the instructors selected from the regular factory force.

#### The Learner.

The learner is taken in from the employment office, taught the activity for which he is best fibted, and promoted to the production floor by the employment office.

It is highly advisable to refer persons of doubtful physique or health to the First Aid department for physical examination to be sure that the person is physically adapted to the work for which he

#### Length of Day.

The length of day is the same as that of the factory itself.

#### Tools and Equipment.

The tools and equipment are identical with those used in the factory itself.

#### Methods of Construction.

The methods of construction and operation are the same as in the factory production.

#### 6. Product.

Instruction is obtained from the regular production of the factory for which the operative is being trained. There should be no preliminary "initiation" or "symbolic" work, although salvage parts may be used to advantage as a minimum in extreme cases for the instruction which is introductory to the training room as in acetylene welding.

#### RATES

There is a difference between the beginning or "learning period" wage rate, in training department, and the "production wage rate after promotion,

So long as the learner knows that the wage rate will be increased automatically upon promotion, and that promotion depends upon "coming up to production", then just so much will the learning period be shortened and the "production gait" acquired. This eliminates all need of discipline.

Here again is the importance of the instructors: "production sense" intensified.

Every instructor should also be a peacemaker.

We are at war and this "army behind the army" must acquire such speed of production as never before known.

#### PERSONAL RELATIONS

This caused many adjustments and is of supreme significance to those who contemplate the induction of women into manufacturing. If the women are patriotic enough to give up their homes for the factory, then the factory must provide carefully for them in addition to legal requirements.

These relations may be summed up as follows:

#### 1. Personal Supervision.

This required a woman supervisor with a factory and production point of view.

#### 2. Clothing.

Uniform: It was found that a "two-piece" garment with complete waist was most satisfactory. It can be made in any factory so that trousers button to waist, Trousers should be full and have small elastic to fit at top of shoes or ankle, thereby securing a good "hang" instead of turning them up and having them slopping down continually. The waist should have close fitting neck, which can be turned under and left open or buttoned, and half sleeves, Special sleeves should be provided for welders, brazers, and others engaged in similar operations involving hazard, which may button on short sleeves. By having a two-piece suit it is unnecessary for a woman to furnish her shirtwaist. Immediately this involves sex suggestion which should be eliminated. The two-piece suit also enables the uniform department to fit each half of the suit to the girl instead of the girl to the suit. Nothing is more suggestive than the uniform that doesn't fit.

The first uniform, costing about \$3.50, is provided by the company without charge and a replacement made when necessary, but if the employee wants two uniforms at once than the second one is provided at wholesale cost.

When the employee leaves the service of the company then a uniform must be returned before the employee receives her employment release slip.

Caps with rubber band (cloth for cooler weather and net for summer) should be furnished with each uniform.

This is a very important element, especially for safety, as a women's hair is likely to catch in moving machinery, even a small motor hand drill. Besides, this eliminates much difficulty as the hair may otherwise become loosened and constantly in the way of the individual.

Aprons are provided for such activities as may soil the uniform rapidly or permanently, -a rubberoid apron in the machine shop, for instance.

Girls like to wear silk stockings and high-heel shoes or slippers.

The stocking should be of cotton and the shoes have low heels. Otherwise the employee will become greatly fatigued, as the high heel places the body in an unnatural position and one cannot work to advantage standing. This was the cause of many women wanting to change over to a "sitting job." Wearing of jewelry is not permitted.

#### 3. Rest Rooms.

Each large department has its rest room for its employees, with a matron in charge.

Admission is by special pass from the forelady, for proper regulation.

It is best to have several such r rooms in a large factory rather than one, as more convenient in an emergency and also preventing a great deal of wandering around the plant which otherwise would develop and cause a waste of time, and confusion.

#### 4. Rest Periods.

Each female employee is allowed a rest period of not less than fifteen minutes each morning and each afternoon.

#### 5. Drinking Water.

This is provided by drinking fountains. In the warmer months the water is iced by having the feed pipe coiled in the bottom of ordinary wooden, metal lined boxes in which ice is placed.

#### 6. Luncheon.

It is the practise of the factories obtaining the best results to serve at least hot soups, tea, coffee, or milk at the lunch hour.

In some cases large restaurants are provided and the lunch hour of the men "sta: ggered" with that of the women so that they eat separately or "staggered" by departments.

In other cases "canteen" stands are found in various sections of the factory where service is given in selling various kinds of food, etc.

It is always best to have one of these for men and another for women.

#### 7. Safety and Sanitation.

A very great percentage of women now entering industry are doing so with little previous factory experience, if any,

Constant attention as to safety and sanitation must be given so as to have the newcomer feel that the medical department or nearby hospital or company physician is a First Aid rather than a Last Aid.

A scratch from fine wire may cause blood poison equally with a more serious injury.

Every effort must be made to acquaint the girls and women of the large service the First Aid can render.

#### 8. Sex Relations.

In many factories sex difficulties have arisen and tended to decrease production.

If the women are properly inducted into industry through training, properly supervised by a matron on the production floors, properly dressed in a uniform garb, all difficulties automatically disappear.

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UAPAC ITY

The operating capacity of the entire training department is two hundred and fifty persons at one time. The training will turn over about once a week on an average thus providing trained workers at the rate of 10,000 a year or less as the factory needs.

Contrast this with a condition found in one of our largest war products plants where the factory needed two thousand trained workers a month and the training department was producing only at the rate of 100 a month.

The Curtiss accomplishment shows that a large comprehensive plan and service is readily feasible if only the factory management insists upon it.

#### FLEXIBIL ITY

The usual custom and tradition of operation schools as a whole is on an annual basis with all instructors contracted for on an annual salary.

These conditions must be entired by forgotten in intensive training of factory workers.

The basis element in a training department is its flexibility. A section for training may operate for one week or two weeks or months. It must be conditioned upon factory needs.

This means that the instructor can best be taken from the depart ment for which the training is required and when the quota of trained people is filled, the instructor goes back on the regular production floor and assists not only in production but also in following up the people trains

No. 130

#### Section on Industrial Training

for the War Emergency

Executive Committee of Section
Percy S. Straus, Chairman, H. E. Miles, Chairman
John Golden
C. R. Dooley

107 Council of National Defense Building, D St., near 17th, N.W. Washington, D. C.

August 12, 1918.

#### BEWARE OF BAD TRAINING ROOMS!

A year ago a representative of the British Ministry of Munitions said that some manufacturers seemed to think that they had only to set up a training room or department and look for miracles of accomplishment.

Three or four instances of bad training have recently appeared.

One great airplane factory put a manual training teacher from a great city in charge.

This man persisted in teaching workers to make nail boxes and "school projects," to practice with hand tools, many of which the several operators would never use, etc. Said he, "Never mind speed. The Government has the money. What it wants is accuracy." His pupils loaf in the training room and later loaf in the factory. His successor will increase production 20 to 40 per cent.

Another director of training with almost a national reputation was given a great deal of machinery but he can't get away from the slow methods of general technical training. He plans to deliver from 80 to 100 all around mechanics into the factory monthly. But the factory wants 1,000 skilled workers monthly and 2,000 other workers monthly, part of them semi-skilled.

Every training department should be developed with the employment office needs in mind. An expert has been sent to readjust this training department who (in a less complicated factory) at the end of 90 days was training at the rate of 8,000 workers annually.

A third factory with 7,000 workers has had a training room for five weeks in which it trains women, mostly young girls, on astonishingly simple operations that could be taught anybody anywhere.

It needs operators on difficult power machines and in the tool room. The foremen have been set against training for those departments. An hour's inspection of the plant followed by a general meeting with lantern slides opened the minds of 100 foremen and superintendents and the factory will now train for these difficult places.

Officers and managers should visit the training departments frequently, speak to trainess and see that the department is perfect in spirit, speed and accuracy.

No training room could hurt you A good one is worth 20 per cent

igitized for FRASER the payroll.
https://fraser.stlouisfed.org

## Section on Industrial Training for the War Emergency

Executive Committee of Section Percy S. Straus, Chairman, John Golden C. R. Dooley

H. E. Miles, Chairman

107 Council of National Defense Building, D St., near 17th, N. W. Washington, D. C. August 9, 1918.

WAR SERVICE FOR MEN WHO ARE OVER DRAFT AGE and for the "Old Men."

Men past the draft age can often render as valuable service as any in war production.

In New Haven (the Boardman Trade School), a painter age 60 quickly learned to be an adept machinist.

Says the superintendent of a factory in Worcester which has one of the best training departments in the country, "I recently hired a man 63 years of age, who has been a pattern maker, a mill wright and a stone mason. He came to me and said he had always "had a hankering to learn the machinist trade." We put him to work in the Training Department and he is showing wonderful progress. His training in these other lines has given him a good course in mechanical work, and we believe that in a short period we can make a first-class instructor out of him to help us in training others who are not so quick to grasp the trade."

In Bridgeport, a laundry shirt ironer age 45 or more in three days was running a screw machine and producing 25% faster than estimated by the maker of the machine. At the end of a week he was taking the machine to pieces to get thoroughly acquainted with it. He was soon getting 60¢ an hour in regular production.

An enameler (and foreman) of the same age was doing as well on a companion machine in the same training room, but he stayed a month in training so as to qualify as foreman in a screw machine room.

A farmer about 68 who had had mechanical training as a youth came into the training rooms of one of our war factories the other day and quickly qualified for skilled production.

A Cincinnati firm, finding it difficult to get boys, has substituted old men with great success. They find these men more dependable, readier to accept responsibility, never absent nor late, and glad, most of them, to have gotten steady employment in a high class institution. While many old men should be used as in this company, it would be an utter misapprehension of their value not to realize that a very great percentage of these older men can be made quickly to equal younger men in skilled work.

England and France give special attention to training the older men who have been merchants, professional men, etc. for very skilled production, tool making etc.

Every man past the draft age should consult an expert in modern shop practice and training and immediately prepare for superior service.

## SECTION ON INDUSTRIAL TRAINING FOR THE WAR EMERGENCY.

EXECUTIVE COMMITTEE OF SECTION Percy S. Straus, Chairman, John Golden C. R. Dooley

H. E. Miles, Chairman

506 Council of National Defense Building, D St. Near 17th, N.W.

Washington, D.C., July 24, 1918.

#### BRITISH EXPERIENCE

Quotation from Mr. Ben. H. Morgan, Special Advisor on Training and Dilution, British Ministry of Munitions, London.

"By the process of dilution we have been able to place in munition works about 950,000 women to do work from the heaviest labouring unskilled operation to the highest grade of tool-room non-repetition work, do not hesitate to say that women have entirely destroyed our pre-war ideas as to what constitutes "skilled" work. When in the early days of the War women were trained to turn out 18 pdr. H. E. Shell and equal the production of male labour many thought that such work amounting as it does to little more than manipulative dexterity, was about the limit of the capacity of women who had not received a regular course of Engineering (mechanical) training. After a few months workshop experience, however, women are today building the greater part of one of the best High-Speed Engines in the country, each woman setting her own tools and work, and able to machine any piece of work that the tool she is on will take. Women are building guns, including the fine fitting work on the breach mechanism, and the cutting of large screw threads up to a shoulder. They are doing most of the work in some shops on 3-1/2 ton Army Lorries and will do practically the whole of it if the war lasts much longer including chassis erection and testing. They are doing important work in marine engine building, turning connecting rods, propeller shaft liners and doing practically all in some cases, of the marked-off drilling. The Aero Engine, as you well know, is a very fine piece of mechanism and at the outset was considered a tool room job throughout. In some shops women are today doing the greater part of the work turning on Centre Lathes to half a thousandth, milling webs of Clerget Cylinders on a booker Miller without stops and setting up their own jobs and working again to half a thousandth limit, boring cylinders on a No. 9 Herbert and similar work on a Gisholt, setting up their own jobs turning and finishing test pieces in various metals to a 5,000th; making tools and gauges of all kinds to fine limits; all varieties of bench fitting to drawings and marking-off work of every description. Locomotives work, steel constructional work, boilers, bending, drilling, and rivetting. Women are doing magnificent work both in regard to accuracy and output."

Note: In shell production British Government contracts require 80% women operatives on shells under 4.5%, with less percentage of women and semi-skilled men on larger sizes. This requirement in the U. S. would prevent shell factories from bidding away great numbers of skilled men needed on other work in other factories.

In the production of fuses and trench tools, grenades, etc., women are doing 60% to 80% of the machine operations, according to their types.

In Enfield and other light arms, women are doing 2/3 of the work. Also a considerable part in the production of the breech mechanism for heavy guns, and light parts on gun carriages, etc. In aircraft work, motors, and planes, women are doing a great part of the work and producing in one factory or another every part used.

Likewise in motor trucks and in tool room and precision work.

H. E. Miles,

Chairman.

Irouning on women August 21, 1918. Miss Mary Schauffler, 133 South Third Street, New Philadelphia, Phio. My dear Miss Schauffler: During Miss Van Kleeck's absence from Washington for a few days I wish to acknowledge receipt of your letter to her of August 11th, inquiring about government courses for training of women to go into factories as welfare executives and employment managers. This work is under the direction of Captain Boyd Fisher, Council of National Defense, 18th and D. Streets, N. W., Washington, D. C. It might be well for you to write directly to Captain Fisher asking for the specific information which you wish. Very truly yours, Secretary to Miss Van Kleeck. igitized for FRASER tps://fraser.stlouisfed.org

133 South Third Street. New Philadelphia. Ohio. August 11, 1918.

Miss Mary Van Kleek, Woman's Bureau,

United States War Department,

Washington, D.C.

My dear Miss Van Kleek,

I have heard that under the supervision of the government there are to be given courses for the training of women to go into factor ies as welfare executives and employment managers. Will you please send me information in regard to this work in which I am very much interested or refer me to the department where I may secure such information ?

Yours truly,

mary Scharffle.

igitized for FRASER

Fraining for evoren August 20, 1918. Mr. C. T. Clayton, Chief Training and Dilution Service, Room 315, Gordon Hotel, Washington, D. .. My dear Mr. Clayton: Enclosed you will find a copy of suggestions for the procedure to promote training for woman in war industries from the Committee of Women in Industry, Advisory Commission, Council of National Defense. These suggestions were presented to the Woman's Council, organized by the Woman in Industry Service, at its last meeting, Thursday, August 15th. Hoping that this will be of service to your Department, I remain Yours sincerely, MARY ANDERSON, Assistant Director, Woman in Injustry Service. Enc. igitized for FRASER tps://fraser.stlouisfed.org

Training for Women. WOMEN IN INDUSTRY SERVICE August 5, 1918. My dear Miss Allinson: Should your committee decide to specialize on the problems of training women, I suggest your getting in touch with Mr. J. V. Johnson, Chief Instructor of the Wright-Martin Aircraft Corporation, New Brunswick, New Jersey, as that company is working out interesting plans for the training of women in several of its plants under the direction of Mr. Johnson, He has written us, and I had an opportunity to talk with him a short time ago in Philadelphia, so that if you should decide to go there and if you have not already met him, I shall be glad to give you a letter of introduction. Sincerely yours, Director, Women in Industry Service. Miss May Allisson, Committee on Women in Industry, Council of National Defense. Washington, D. C. igitized for FRASER tps://fraser.stlouisfed.org

Was Live Training CONFERENCE B WOMEN IN INDUSTRY SERVICE July 26, 1918. My dear Mrs. Swant Since the receipt of your letter of July 10th I have been awaiting the arrival of the Bulletin which you sent me. It must have gone astray. I shall be much interested in seeing it if you will send me a second copy at this address, Ouray Building, Room 604, Washington. The questions which you are raising as to the need for training and especially the offering of longer courses for women in the mechanical trades are so interesting and important that I would like very much to have an opportunity to talk them over rather than to attempt to write about them. The question of training women for the machine trades is one in which there should be conference both with employers and in the International Association of Machinists. If you are planning to be in Washington at any time in the near future I shall be very glad to talk with you. Sincerely yours, Director, Women in Industry Service. igitized for FRASER ps://fraser.stlouisfed.org

JARD

LEADERS

LEV

ARY E. RICHMOND
AOSS
S ELLEN LOUISE ADEE
STRIAL MOBILIZATION
MRS. FLORENCE KELLEY
MRS. ALEXANDER KOHUT

FOOD

PRODUCTION
MISS HILDA LOINES
DISTRIBUTION, CONSERVATION
MISS MABEL H. KITTREDGE

PROTECTION OF THE YOUNG MISS STELLA MINER MISS SARAH C. WELLS

RECREATION
MISS LEILA NEWCOMB
MISS VIRGINIA POTTER

TRAINING FOR WAR WORK
MISS EMILIE J. HUTCHINSON

WAR FINANCE
MRS. COURTLANDT BARNES
WORK FOR ALIENS
MISS MARY E. DREIER

MISS MARY E. DREIER
EMERGENCY SERVICE
MISS GRACE PARKER

REHABILITATION AND RE-EDUCATION MRS, RIPLEY HITCHCOCK

# COUNCIL OF ORGANIZATIONS FOR WAR SERVICE

(CO-OPERATING WITH WOMAN'S COMMITTEE, COUNCIL OF NATIONAL DEFENSE)

CLEARING HOUSE FOR WAR WORK VOLUNTEERS CLEARING HOUSE FOR WAR TIME TRAINING FOR WOMEN

4 EAST 39TH STREET
TELEPHONE: VANDERBILT 5876

GENERAL COMMITTEE

CHAIRMEN FOR THE BOROUGHS
MRS. WILLARD STRAIGHT, MANHATTAN
MRS. EDWARD DREIER, BROOKLYN
MRS. DAVID R. RODGER, QUEENS
MRS. CHARLES E. SIMONSON, RICHMOND

MRS. CHARLES L. TIFFANY, TREAS.
MISS AMEY ALDRICH
MRS. AUGUST BELMONT
MISS VIRGINIA GILDERSLEEVE
MRS. HENRY MOSKOWITZ

CHAIRMAN OF CLEARING HOUSE FOR WAR TIME TRAINING FOR WOMEN MRS. JOSEPH R. SWAN

CHAIRMAN OF CLEARING HOUSE FOR WAR WORK VOLUNTEERS

MRS. EDWARD MCVICKAR

July 10, 1918.

JUL 12 1910

Miss Mary Van Kleeck, Ordinance Department, State War and Navy Building, Washington, D. C.

My dear Miss Van Kleeck,

We sent you a few days ago a copy of the bulletin gotten out by the Clearing House for War-Time Training for Women of the Council of Organizations for War Service, the plans of which I had talked over with you before you went to Washington.

We are very anxious to have your frank judgment and criticism on this bulletin. We, ourselves, feel conscious of many defects in regard to clearness of arrangement, typing, etc., which we plan to rectify in our next bulletin to come out on September first.

In this second bulletin we shall hope to go further into the question of needs for different kinds of training. We are getting material for this from Mrs. Neale of the United States Employment Bureau, Mrs. Crocker of the Municipal Civil Service Comission, Committee on Industrial Training for the War Emergency of the Advisory Commission of the Council of National Defense and the Federation of Non-Have you any other Commercial Employment Bureaus. suggestions as to sources of information regarding This coming bulle tin needs for training at this time? will list all permanent or emergency courses for women relating directly or indirectly to war work to be given in New York City.

Another question upon which we would very much like to have your judgment is in regard to the training of skilled women mechanics. The present tendency so far as we can gather is toward relegating women to the more unskilled processes. How far would you feel that it is wise at this time to advocate longer training courses in mechanics

NS:RR

gitized for FRASER tps://fraser.stlouisfed.org

WOMEN IN INDUSTRY SERVICE July 26, 1918, My dear Mr. Nichola: In my new work in the Women in Industry Service I shall have a new and added interest in the outcome of the work of the committee appointed by the Commission on Training Camp Activities to make recommendations on the employment of women in military camps. I should be grateful to you if you would let me know the present status of the committee's recommendations, and I shall be glad also to have your opinion as to any help which the Momen in Industry Service can render in this connection. Sincerely yours, Director, Women in Industry Service. Mr. L. H. Nichols, Commission on Training Camp Activities, Ninateenth and G street, N. W., Washington, D. C. igitized for FRASER tps://fraser.stlouisfed.org

NOTED WAR DEPARTMENT COMMISSION ON TRAINING CAMP ACTIVITIES WASHINGTON RAYMOND B. FOSDICK APR291918 CHAIRMA LEE F. HANMER LEE F. HANMER
THOMAS J. HOWELLS
JOSEPH LEE
MALGOLM L. MCGRIDE
JOHN R. MOTT
CHARLES P. NEILL
BRIG, GEN. P. E. PIERCE, U. S. A.
JOSEPH E. RAYCROFT W. PRENTICE SANGER April 15, 1918 Miss Mary VanKleeck Women's Division, Ordnance Dept., War Department 6th & D Streets Washington, D. C. My dear Miss VanKleeck: Attached herewith is a copy of the final report of the Committee embodying all the suggestions made at the last meeting and submitted to the Commission on Training Camp Activities on April 3d. The Commission approved the report and its recommendations, and referred it for action to the Executive Committee. The Executive Committee is now considering it, but I believe a report will be sent to the Secretary of War within a day or two. Mr. Fosdick has requested that this report be printed in pamphlet form as part of an educational campaign in connection with the recommendations. The report before being printed will be slightly expanded, and the appendices incorporated in the body of the report. No other changes will be made. Very sincerely yours, Herrical Office Manager LHN:E igitized for FRASER tps://fraser.stlouisfed.org

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Federal Reserve Bank of

amps.

Summary of Conditions in National Guard Camps.

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From: The Committee on Employment of Women in Military Comps.

To: War Department Commission on Training Comp Activities.

Subject: Report.

with 5,000 women already employed in the thirty-two National Army and National Guard training camps and no definite policy for their supervision, the imperative question has arisen as to what should be done with them. Public policy demands, under present conditions and with a proable tendency for the worse if steps are not taken to meet them, that one of two alternatives be adopted; either that women shall be entirely debarred from camps and all work therein done by men or that a broad universal plan for the employment and supervision of women be adopted.

The Committee appointed to investigate this problem by Mr. Posdick,
Chairman of the Commission on Training Camp Activities, has very carefully considered both possibilities. It seems certain that women can never advantageously be excluded from the training camps, a fact which is demonstrated by the experience of Great Britism. With the new German drive and the call of American Generals in France for an army of 5,000,000 men, it will be increasingly necessary to free mon for active service at the front by whatever means are possible. We are being drastically criticised by the English and French because we are employing to such an extent men in work for which women are better classes fitted. There are certain/obsect of work which must be done in the camps, for which women are trained and therefore peculiarly adapted. In view of these facts, the Committee has abandoned the idea of excluding women from employment in the camps, and has adopted the other alternative.

Obligation rests upon us to devise and adopt a broad general policy

igitized for FRASER ttps://fraser.stlouisfed.org must be sufficiently extensive to include not only the women now employed or to be employed in the camps, but also, when it becomes necessary, all others engaged in war work in the United States or abroad. Such a plan perhaps need not be put into effect in its entirety at once, but should be step by step as occasion arises. The inevitable future extension of women's work in commection with the Army must be kept in mind in formulating a policy.

#### Conditions in Training Comps.

Women are now employed in every one of the Mational Army and Mational Guard training camps in one or more of the following classes of work: Leundries, post exchanges, telephone operators, nurses, clerks and stenographers, librararians, etc. As time goes on, it is expected that still more will be employed, with a correspondingly greater problem with which to cope. There is in many camps a lack of policy regarding the supervision and care of these women, and no plan has yet been evolved to include the country as a whole. In practically every camp, the telephone operators are cared for by the telephone companies and are well housed and supervised. The nurses are already under Government care. In the other classes of employment, however, less attention is paid to the welfare of the workers. Conditions are most serious at Comp Sherman, Chillicothe, Ohio, where nearly 500 women are working in the post exchanges, the laundries, and other places in the camp. There has been so little attempt at supervision that several cases have come to light where immoral women have been able to main free access to the camp under the protext of employment. At Camp Sherman, the situation is a menace both to the women employed and to the soldiers. At Camp Funston, conditions are also serious. In some of the camps the situation has not yet developed into such a serious state as in the two camps named.

Conditions are bad in training camps where private concessions exist, either for assissment purposes or for doing laundry work, etc. In practical operation it proves impossible to exercise adequate control over concessionaires, who employ women because they attract trade and take no precaution to keep our undesirables. Recommendations on this matter will be included with other recommendations to follow.

Attention is called to the fact that in over one-hald of the camps inadequate housing facilities are reported. In these cases the women are forced to live in boarding houses, often not of the best character. In many localities the rates for board and rooms in such boarding houses are higher than girls working for such wages should be made to pay. About 50 per cent of the women in all the camps require transportation to and from their places of work. Frequently, no attempt is made either by Government officials or by private concessionaires to ascertain the character of the women's lodgings. Supervision over the women who are off duty is lacking.

It may be said in general that there is no adequate supervision over the employment of women in the military camps. A summary of reports received by the Committee from the camps is appended (exhibit A), and shows that where conditions are not yet serious there are dangerous possibilities. How to take care of these women and to safeguard both themselves and the soldiers is a problem which must be met immediately.

In view of the above facts, the Committee has agreed upon the following principles:

- 1. The employment of women in training camps in the positions named above is necessary. This fact must be recognized.
- 2. Obligation rests upon the Government to take the responsibility for the care of women employed in its camps. Just as it provides for the men who have been drafted in the military service, so must it accept

the responsibility for the welfare of the women who are serving the country.

- 3. The women who work in military comps ought to be organized into one national system.
- 4. The women should be employed or recruited by some single agency. This agency should be required to establish definitely the applicants mental, physical, and moral fitness before she is employed. The agency should satisfy itself as to the past record of the applicant before recommending her for employment.
- 5. Definite standards for the various classes of work, namely, hours of labor, wages, age limits, etc. should be stated.
- 6. The policy must include adequate supervision over the welfare of the employees, both on duty and off duty. This supervision must be exercised by the Government and not by any private concassociation.
- 7. Construction in every camp of adequate housing facilities to take care of the workers there employed is immediately necessary. No women should be sent to take positions until adequate housing has been provided to receive them.

#### Foreign Experience.

In formulating a comprehensive plan for the employment of women, the Committee turned to other belligerent countries to see how they had handled similar problems. In the experience of Great Britain was found the solution. In England, prior to 1915, women were engaged only occasionally in war work, under the same lack of system which now exists in the United States. Then it was found necessary to organize all the women so employed in England into one unit known as the "Women's Legion." When in 1917 the government decided upon the substitution of women for soldiers in certain occupations at French Bases, the Women's Legion was extended into the "Women's Army Auxiliary Corps."

This corps was formed for the purpose of co-ordinating all women's organizations already in operation, and a strict organization under military authority was effected. Therein lies the secret of the success of the Women's

Army Auxiliary Corps: It is under military authority, officially recognized as a branch of the War Office. At the head of the Wemen's Army Auxiliary Corps is a Chief Controller - a woman - who is responsible to the Adjutant General at Army Headquarters. The corps is administered on Army lines. Not only is this the solution of the problem of the employment and supervision of semen in military work, but the fact that the corps is actually a recognized part of the war machine is an inspiration, and women of the highest type are attracted into war service. A brief report on the Women's Army Auxiliary Corps attached hereto (exhibit B) is well worth reading.

#### Recommendations

The Committee recommends the adoption of the following plan:

- L. The organization of a Women's Reserve Corps as a branch of the War Department and reporting to the Secretary of War. The organization of this corps should parallel that of the Women's Army Auxiliary Corps in England. It should have its own officers, with ranks corresponding to those in the Women's Army Auxiliary Corps. Members of the corps should be subject to military law and should at all times obey the general routine orders and local standing orders. Members while on duty should be under authority of the officer in command of the unit in which they are working and, when off duty, under the supervision of the women officers.
- 2. All woman employed in military camps should be enrolled as members of this corps. Recruiting should be done by the corps, which may avail itself of existing agencies for this service, such as the United States Employment Service and others.
- 3. Stations should be established for the instruction and training of newly enrolled workers for a short period before they are placed in active service. Wemen to serve as officers should be recruited and trained in special officers training camps.
- 4. An official uniform for members of the Women's Reserve Corps should be adopted, together with suitable insignia, similar to those worn by members of the Women's Army Auxiliary Corps in England.
- 5. For women already in service at the camps, it is imperative that housing facilities be constructed immediately.
- 6. Wages and hours of labor should be standardized for each type of work.

- 7. The minimum age limit for women accepted for such military service should be 21 years.
- 8. Statutory provision should be made for insuring the members of the corps while in the service of the United States. The War Risk Insurance Bureau is preparing an amendment to the War Risk Insurance Act which will allow it to include such woman.
- 9. The practice of granting concessions near the camps to private individuals or to firms should be abolished. Concessions already granted in the camps should be withdrawn and all work in the camps should be done by the Government. No more concessions should be granted within communities outside of camps.

best one suited adequately to meet existing conditions and at the same time to admit of future expansion. It is a plan which can be extended to include women who may be sent to France for war work, as well as those employed in the camps and the factories in this country. The effect on the women themselves is obvious. It will dignify their work by recognizing it as a part of the Army organization. It will engender an esprit de corps conducive to efficiency and self-control, and give them a keener sest in helping the cause. Furthermore, by doing away with the bad conditions resulting from lack of supervision, women of the highest type will be attracted into war service.

The obvious advantage of the comprehensive plan rather than special recommendations for individual problems is that such a plan once organized in skeleton could be applied at once to individual problems pressing for solution. Machinery would be set in motion which could be expanded indefinitely to meet an almost inevitable increase in the number of women in war work. This will relieve overburdened Government officials from further consideration of individual cases.

#### Immediately Needed

The Committee can not too strongly emphasize the need for the immediate construction in the military camps of adequate housing facilities for the women employed therein. The Committee is not yet prepared to give the number of women now employed or to state the extent of the housing problem. It is estimated that there will be from 75 to 500 workers in each of the camps.

The construction of housing facilities in the training camps, even of the most temporary character, will take about two months. The need is already so acute that the Government can afford to less no time in beginning construction. The construction of any housing should, of course, be accompanied by the adoption of a policy for the intelligent supervision of the women who are to be housed.

Respectfully subsitted,

Chairman.

THE WOMEN'S ARMY AUXILIARY CORPS
OF ENGLAND.

W.A.A.C. OR "Tommywacks"

L. Summary, W.A.A.C.	(a. History, *** (b. Recruiting, (c. Organization, (d.dAccommodations,	-" 2 - " 2-3	
II. Deductions from English Experience.	(a. Necessity for comprehensive scheme,	" 3 " 3 " 3-4	
III.Possibility of Adapting Scheme to our Needs	(a. Advantage of comprahen- (sive plan capable of in- (definite expansion, (b. Relief of Government (officials, (c. Trained women now available, (d. Opinion of some women al- ready in war service,		
IV, Elaborated Abstract of the W.A.A.C.	(a. History,	" 7-9- " 9-11	

I and IV Compiled from several typewritten reports, newspaper and magazine articles etc. and the data arranged and classified by

Eleanor Bushnell Cooke

February 1918.

#### SUMMARY.

#### WOMEN'S ARMY AUXILIARY CORPS( W.A.A.C.)

#### History.

a. tach

The precursors of the W. A. A. C. were the Voluntary Aid Detachment and the Women's Legion (1915). These furnished cooks, motor drivers, help for the Ministers of Munitions, etc., etc., who were recruited through Labor Exchanges.

Object.

Object: To release men; to improve cooking and cleaning in hospitals and convalescent homes, etc. First experiment, August 3, 1915. Within five weeks 100 cooks were accepted. Thereafter no question about value of women over men.

r Army Recognition. 1916. Recognized by Army Council Instruction which defined position—pay and condition of service under officer commanding samp.

1st regular First employment in regular camps, April, 1916. Mess of 500 camp experiment officers. Over 6000 cooks and waitresses supplied later in 200 camps. 400 women released nearly one-half battalion.

Extraordinary economies effected. All W. A. A. C. (domestic) members begin service as assistants, regardless of previous training. Often rise quickly. A girl of 22 is responsible, in one camp, for the whole mess service for 22,000 men. Extraordinary economies have been effected by the substitution of women for men.

Charter for service at home and abroad, June, 1917. In 1917, government decided on substitution of women for soldiers in certain occupations at French Bases. W.A.A.C. officially recognized for that service. Co-ordinating of existing agencies, not easy. Grave consideration of every problem involved, preceded completion of W.A.A.C. charter, June 1917. Strict organization effected, under military authority. Housing most difficult problem. No woman employed tintil suitable accommodations provided, by military officers, assisted by W.A.A.C. administrators. Higher standard housing than for men.

Experiment a success after three months

After three months' trial, the experiment of employing women in camps both at home and abroad has proved a complete success.

1918.

Now recruiting at the rate of 10,000 a month.

(End of History)

#### Recruiting System.

Procedure:

Procedure for candidates.

Registration at recruiting center attached to Labor Exchanges. Examination by travelling Medical Boards. Examination by selection committee as to suitability for work chosen, there being over 60 kinds of jobs available.

Training for service.

Training in Depot Hostel, in drill, discipline, duties, privileges, etc., etc.,; such Hostels all over country. Inoculation, vaccination.

Uniforming, etc.

Drafting away, in groups of 20 or 30, to camp or town, always in charge of W.A.A.C. supervisor.

Full pay during instruction.

Procedure for Army.

Organization.

The procedure of the Army in search of women workers, given under " Recruiting " in body of paper.

#### Organization and Administration

The organization of the W.A.A.C. includes the

Chief Controller, responsible to Adjuntant General, General Army Headquarters.

Deputy Chief Controller

Area Controller, supervises arrangements for the Corps in districts.

Unit Administrators, in charge of hostels.

Deputy and Assistant Deputy Administrators

All corresponding to officers in the Army

Forewomen

and

Worker's

correspond with other Army ranks.

Relation to Army.

The Corps is administered on Army lines. All engage to submit to discipline and are subject to rules of W.A.A.C. and general army orders, which never conflict.

Pay:

Pay.

20 pounds yearly, board and lodging; Scrubbers, (Lowest grade) Cooks and 26 pounds yearly, board and lodging; domestics, From unskilled to highly skilled 20/ to 40/ weekly, with 14/ deducted if labor , living in hostels.

Minimum age - home service, 18; service abroad, 21

Insurance.

Sick Benefits.

All subject to Insurance Act and entitled to full pay for theee months if sick or injured, and part pay after three months.

The relation of the W.A.A.C. to the Army is shown in more detail in quotations from "General Instructions No.1", under "Organization and Administration."

#### d. Accommodations ( Housing)

Most difficult problem.

Principles established.

Reports from the front. The most difficult problem in connection with the W.A.A.C. is that of housing. The system is as yet undeveloped as to grouping and number of huts in camps, or of houses rented for officers, and living quarters. Decisions are based on local needs and supplies. Certain principles have, however, been definitely established. No women are employed until suitable accommodations are provided for them. All hostels, however small, are in charge of a W.A.A.C. supervisor.

Great attention is paid to the welfare of the women, both

Great attention is paid to the welfare of the women, both by Army authorities and by the officers of the W.A.A.C.

Some camps have three or four houses, accommodating 15 or 20 women. The largest camp contemplates 500. Enthusiastic letters from girls in France describes the housing arrangements, but they do not suggest any standardization of arrangement as yet.

### II. Deductions from English Experience.

Comprehensive scheme recognized as a necessity.

Certain anticipated difficulties found negligible.

Effect on soldiers.

a. In England, a comprehensive scheme for the employment of women in the Army both at home and abroad was early recognized as an urgent necessity. The organization of the W.A.A.C. has proved a complete success, demonstrating either that some of the anticipated problems were negligible, or offering a practical solution of them.

- b. Among those of the former class, "the sex difficulty has not been anything like what was predicted. The women have been hard at work and absorbed in their jobs, and the men have respected them". The ppinion on this score is practically unanimous. The fear that the Army would resent giving up their jobs to women proved groundless also. Apprehension as to the effect on the spirits of the men proved unnecessary also.
- c. Instead of being depressed that England had been "reduced" to mending women to France, they were greatly stimulated to recognize a vast army of resources hitherto untapped.
- d. The effect on the women themselves is to dignify their

Effect on women themselves.

work by recognizing it as a part of the Army organization, to engender an espitit du corps conducive to efficiency and self-control, to give them a sympathy for the soldier at the front, and a keener zest in helping the cause.

Reasons for the success of the W.A.A.C.

The marked success of the experiment in meeting the remaining problems seems to be due to definite organization of the women themselves in the W.A.A.C.: careful selection and training of both administrators and workers therein; definite organized relation to the British Army. The maximum of liberty out of working hours (under direction of supervisors). consistent with proper control and discipline; comfortable and suitable housing arrangements made by the War Department through W.A.A.C. administrators, always in advance of the arrival of units; extreme care in the selection of women administrators for marked qualities of leadership rather than for arbitrary governing ability, and for the creation of genuine esprit de corps: special training for all grades of membership preparatory to service: strict attention to the women's welfare by Army authorities, and careful supervision over their subordinates by all grades of the Corps; the employment of practical women who have been through the mill themselves; recognition of the women as responsible workers who must not be treated as children; a spirit of equality according to capacity and a sense of responsibility and enthusiasm which can only be maintained at a maximum by thorough organization; co-operation and unity of training and opportunity.

III. Possibility of Adapting Scheme to our Needs.

Application to our problems.

The possibility of adapting the W.A.A.C. methods to our own needs in solving the problems of the status and control of women in camps (and elsewhere in war work) naturally suggests itself. There does not seem to be any valid objection to the serious consideration of such adaption, in view of the success of the English system, the similarity of the general problems involved, and the flexibility of the organization—which could be fitted to our special requirements.

Advantage of comprehensive plan.

a. The obvious advantages of a comprehensive plan, rather than special recommendations for individual problems, are, that a comprehensive plan, once organized in skeletom to cover the matter of Enlistment or Recruiting, Administration and Housing could be applied in principle and practice at once, to individual problems pressing for solution, and machinery would be set in motion which could be expanded indefinitely to meet what is bound to be an increasing use of women for war work, thus relieving overburdened Government officials from further consideration of distressing individual cases.

Relieves government officials of consideration of special cases constantly pressing. Trained women now available.

Opinion of some women already in war service.

Trained women are already available for the skeleton organization, who might continue at their present civilian work, while giving a part of their time to the development of the organization and the establishment of the training centers, and thus be ready to function when the demans begin to pour in for women workers in great numbers.

Personally, I feel taht there are already enough women engaged in war work under the Government and outside of it, to justify their organization as a distinct body, and my conversation with a number of them justifies the conclusion that they would welcome such recognition of their part in the whole scheme, and be glad to assume any further responsibilities, that would be entailed by such organization.

Respectfully submitted,

Eleanor Bushnell Cooke

(Mrs. Morris Llewellyn Cooke,) The Brighton, Washington, D.C. February 7, 1918.

#### THE WOMEN'S ARMY AUXILIARY CORPS ( W. A. A. C. )

History.

Women's Legion.

The precursors of the W.A.A.C. in England were the Voluntary Aid Detachment and the Women's Legion (W.L.), the latter organized in 1915 by Lady Londonderry, to provide cooks, motor drivers, and members of Signal Corps. Later, help for the Minister of Munitions. C canteens, and for agriculture was furnished, and finally, a motor transport section. These were recruited through regular labor exchanges.

Objects.

The object was to release men and to improve cooking and cleaning and introduce economies in hospitals and convalescent First Experiment homes. The first experiment was sending of twenty Women's Legion cooks, on August 3rd, 1915, by Miss Barker, to the Dartford Convalescent Camps. Three weeks later, sixty cooks were sent to the Eastbourne convalescent home, releasing sixty men. Two weeks later, twenty cooks went to Epsom. Thereafter there was no question about the value of women cooks in convalescent camps and hospitals.

Army recognition and control.

In 1916 an Army Council Instruction defined the position. pay and conditions of service of Women's Legion employees. At first they were under orders of the officer commanding the camp and engaged to serve twelve months, or for the period of the war (whichever less).

First employcamos

The first employment in regular camps was inaugurated in ment in regular April, 1916, to care for the mess of 500 officers, and two k months later a large contingent was sent to the South of England. In July, 1916, an Army Council Instruction formally sanctioned the employment of cooks and waitresses of Women's Legion for officers' mess, when men could be released, and later the W.L. supplied over 6,000 cooks and waitresses in 200 camps for officers a nd. sergeants' messes and cadet battalions. Also, for Canadian and Australian hospitals. 400 women released nearly one-half battalion of men, and the number steadily increased.

Results.

Promotions.

Remarkable economies effected.

All the superintendents, some with three years' training in domestic science, cookery and laundry work, and several with a university education, had to begin their career in the Legion as assistant cooks. Some rose quickly, e.g., One girl of twentytwo is responsible for the whole service of a rest camp of 22,000 men. In many cases the economy resulting from the use of women is extraordinary. Thereby the daily mess charge was reduced from 2/6/ to 1/3/, and finally 9d. a head, and 100 pounds saved for the benefit of the men in general. As a result the wages of the women cooks were raised from 20 pounds a year to 26 pounds a year for the lowest grade, and the office expenses from public funds were reduced.

with the ladies sent to secure quarters for the Corps, and preliminary arrangements were so rapidly carried out that it was possible to send out the first party of women at the end of April.

In its substitution of women for men in over sixty kinds of work, in increased economies and efficiency in the domestic departments, and in overcoming what seemed insurmountable obstacles, the experiment of three months has proved a complete success. Now recruiting at the rate of 10,000 a month.

Further details of the system can be found under the headings, "Recruiting System", "Administration", "Accommodations", and "Conclusion".

The W.A.A.C. is augmented through the voluntary enlistment of women in its various activities and by the Demands made on the War Office from the General Headquarters of the BRItish Army. This procedure in the first case can best be given by quoting the following letter

Recruiting.

October 12th, 1917.

B.

Results.

-8THE WOMEN'S ARMY AUXILIARY CORPS
(W. A. A. C.)

Recruiting (Continued)

Miss Emma Gay,

Madam:

Bristol, (England) Kannich Wincombe

There are now Recruiting Centers all over the country. Attached to the various Labor Exchanges where Women desirous of enlisting in our Corps may give in their names. They then go before a traveling Medical Board, which periodically visits large towns for the purpose of examining recruits. There is also a Selection Committee which decides whether a woman is suitable for the branch of work she wishes to take up. These branches are most various and include Clerks, Storekeepers, Sailmakers, Cooks, Waitresses, and all kinds of domestic workers; also motor drivers, electricians, orderlies. When a prospective member is passed "fit" by the Medical Board, and the Selection Committee are also satisfied, after a day or so, she is "called up" and posted to a depot hostel, where she will undergo a short period of training in drill, discipline, etc. This period varies in duration according to the demand by the various units for her class of work. Eventually she is drafted away to work with some regiment, either in the camps on Salisbury Plain, or to a town. The Depot Hostels are all over the country and the women are trained by forewoman, who correspond to the N. C. O.'s (non-commissioned officers) of the Men's Army. There are also training schools, where inexperienced cooks. waitresses, etc. may undergo a course of instruction. The women receive full pay during their instruction.

The clerks and shorthand typists are usually employed in the Orderly rooms of the Regiment, waitresses in the officers' and sergeants' messes, cooks replace the men in the cook houses, motor drivers go in the A. S. C. or R. F. C., storekeepers in the Quartermasters' Stores, and sailmakers are also attached to the Royal Flying Corps. Suitable quarters are invariably provided for the members in the unit to which they are attached, and each draft is under a forewoman of the category to which they belong. The women may join for service at home or abroad, but in the latter case they must be over 21 years of age. For home service only, the minimum age is 18.

Yours very truly,

W.A.A.C.No. 3436 M. C. Ross, Clerk Depot Hotel W.A.A.C.Clifton, Bristol

On entering hostels women are solemnly enrolled and their agreements are signed before a military officer. During the three weeks' more of less of training, they are inoculated, vaccinated, uniformed, taught elementary marching drill, and

Letter giving enlistment and training plan.

#### THE WOMEN'S ARMY AUXILIARY CORPS (W. A. A. C.)

#### Recruiting (continued)

3 weeks' Hostel training, etc.

"Drafted over"

given lectures on their duties and privileges. Here they form associations and friendships which are invaluable in the service in France. They are sent abroad in parties of from 30 to 60, under one of their own supervisors, only when their administrators have arranged with the Army authorities for suitable accommodations.

The procedure of the British Army authorities seeking women workers is briefly as follows:

General Headquarters informs the War Office of a definite place to be filled. The War Office requests the Director General of National Service to obtain women. The Director General so British Army seek- instructs the local committee under him to invite applications by advertisement, by personal application, or at recruiting meetings of the Corps. The Selection and Medical Boards then select suitable applicants and assign them to Hostels for training, whenever such accommodations are available.

Procedure of ing women for positions

#### Organization and Administration C.

The W. A. A. C. organization includes a Chief Controller who is responsible to the Adjutant General at Army Headquarters; a Deputy Chief Controller; Area Controllers who supervise arrangements for the Corps in districts at home and abroad; unit administrators, in charge of Hostels; deputy and assistant deputy administrators. The controllers and administrators correspond to officers in the Army; the forewomen and workers, to other ranks in the Army. The service covers over 60 varieties of domestic, technical, mechanical and clerical work.

Officers and their functions

Relation to Army

Duration of service

Pay

Insurance sick benefit

The Corps is administered on army lines. Officials gazetted as controllers are detailed for general (staff) duties. The Chief Controller (France) is under orders of the Adjutant General at General Headquarters. Area Controllers are attached to Staff at Base or other commands for W. A. A. C. purposes.

Pay for scrubbers is 20 pounds yearly, with board and lodging; for cooks and domestics, from 26 pounds a year, board and lodging; from unskilled to highly skilled labor, 20/ to 40/ weekly, with 14/ deduction for board and lodging if in hostels. Grants are allowed for uniforms, and service is for a year, or the duration of the war (the longer period). Service can be given either at home or abroad (minimum age, at home, 18; abroad 21). All engage to submit to proper discipline. All W. A. A. C. are subject to the Insurance Act and if sick or injured are entitled at home full pay for three months, reduced from that time,

-10-THE WOMEN'S ARMY AUXILIARY CORPS (W. A. A. C. ) Organization and Administration (continued) and abroad to the same, with free medical treatment. According to General Instructions No. 1, when on duty all members obey orders of officer commanding unit, or office in charge of unit. Off duty, they are under the supervision of their Controllers, Administrators, and forewomen. The W. A. A. C. obey general poutine orders and local standing orders. Administrators will not issue any rules which contravene these orders. Persons not belonging to the Corps are not admitted into W. A. A. C. camps or hostels, excepting on duty, or with pass. Military c camps or barracks are out oftbounds for all grades of W.A.A.C. Abstract of except on duty, or with pass. "General Instruc-The Salute is"Ma'am". tions No.1 " The uniform is always worn unless by sepcial permission. Members off duty will not associate with officers or other much ranks of the British Armies in France, except with those holding fank comparable with their own grades, except by special perabbreviated. mission. W. A. A. C. members are subject to military law, under command of the officer commanding the unit. The Chief Controller grants to the Administrator power of handling minor breaches of discipline. All serious breaches of discipline are reported through regular channels to the Adjutant General. Orders are republished in all local standing orders at stations where the W. A. A. C. are employed. (The "General Instructions No.1", from which the above is abstracted, is signed Adj. Gener'l. Sgt. Gener'l. G.H..Q. 6/1/1917.) W. A. A. C. uniforms include great- coat and skirt, or one-piece frock, stockings, shoes, leggings and hat, differ-Uniforms. ing in detail according to grades. The insignia include Shoulder-straps inset with colorblue for headquarters, orange for administrators, the colors differing for Administrators, - domestic, clerical, mechanical, Insignia. and miscellaneous sections. Corps badges are worn and the fleur de lys and rose in different numbers and arrangements indicate the grades of controllers and administrators. Much of the success of the W.A.A.C. plan depends on the tact and personal influence of the Administrators in charge of Success due to tact and influence hostels or camps. They vary in grade from Administrators and of Administrators. Deputy Administrators to unit Administrators, according to the size of the hostel, and are carefully chosen for their training igitized for FRASER tps://fraser.stlouisfed.org

-11-WOMEN'S ARMY AUXILIARY CORPS (W. A. A. C.) Organization and Administration (confinued) Their previous and experieice. They comprise ex-house mistresses and housetraining keepers in schools and large institutions, women trained in welfare work, and superintendents of schools organized by the Qualities chief-Minister of Munitions; university women and those who have gained ly sought. experience in canteens and Girls& Clubs. The qualities chiefly sought in them are that they should have been used to dealing with girls; have helped to organize games and women's work; and above all, that they should have tact and strength of character. Instruction of In order to fit them better for their special work, all the Administrators. grades of administrators and controllers receive instructions before being sent out to take up their duties. The course includes lectures on organization and administration, accounts and rations, insurance, travelling hostel equipment, official returns, reports and correspondence, and hygiene, and they are required to visit Army record offices and W. A. A. C. hostels already established in England. Another reason for the success of the W. A. A. C. is the Success due to recognition of the fact that its members cannot be treated as children; they are carefully chosen in the first instance and are recognition of doing a responsible work. For this reason a great deal of liberty women as responis wisely given to them and the rules and regulations are not unsible workers. necessarily stringent. There are certain restrictions about entering cafes in France, and occasional roll calls at hostels. Discipline. but the Administrators may sanction inviting men to public recre-Liberty. ation rooms in hostels, and much liberty is given out of office hours. Women with genuine qualities of leadership must in-Privileges. spire their subordinated; the credit and honor of the Corps has proved the principal deterrent and incentive. Esprit de corps. It is notable that the women of the Corps below the grade corresponding to Army officers are treated in exactly the same way No class distinc-There is no feeling of class distinction. A cook at 26 pounds a year is, for social purposes of the Corps, on an equality with tion. a shorthand typist earning 37/ to 39/ a week. All possible c consideration as given to keeping friends together, but the Equality of principle of equality based on capacity is established in the capacity. Corps. D. Accommodations (Housing) In planning for the W. A. A. C., "the main fifficulty that arose lay in the question of accommodations for the women. It was essential that no women should be employed until suitable igitized for FRASER tps://fraser.stlouisfed.org

igitized for FRASER ttps://fraser.stlouisfed.org

Training of Women, WOMEN IN INDUSTRY SERVICE July 22, 1918. My dear Mr. Johnston: Thank you for your letter of July 17th. Since talking with you I attended a meeting of Ordnance Manufacturers in the Philadelphia District to speak on the problems of women's work at the request of the Philadelphia District Ordnance Office. Mr. Miles was a speaker on the same evening. From the point of view of practical methods of training he has many useful suggestions to make. It is, however, increasingly clear that the International Association of Machinists has an important problem to work out in connection with the introduction of women, which seems inevitable in the near future. Constructive plans on the part of the Machinists' Union would be the best means of guarding against the dangers of ill-considered and indiscriminate training of women for work in machine sheps. Miss Anderson and I would both be glad to confer with you at any time on this subject, and we should appreciate it if you would keep us informed of any action which the machinists may be taking with reference to the introduction of wemen in important machine centers. Sincerely yours, Director, Women in Industry Service. Mr. William H. Johnston, Washington, D. C. nitized for FRASER os://fraser.stlouisfed.org

RNATION OF LABOR AFFILIATED WITH International of Machinists FOUNDED IN THE CITY OF ATLANTA, GAL MAY 5, 1888 INTERNATIONAL HEADQUARTERS 400-407 MCGILL BUILDING WM. H. JOHNSTON, UNTERNATIONAL PRESIDENT OFFICE OF THE PRESIDENT J-J Washington, D. C., July 17, 1918. Miss Mary Van Kleeck, In Charge Women's Branch In Industrial Service, War Department, Washington, D. C. My dear Miss Van Kleeck: The following is copy of letter received from Business Agent, Mr. Kelton of Philadelphia, which I am sending for your information. Any comment or suggestion you have to offer will be very much appreciated. "Yours of the 15th received in reference to Industrial training and read with much interest. I have never met this Mr. Miles nor heard of the Vestibule school; this is sure some surprise and I would like to know where it is located as I believe it should be investigated. I met Miss Van Kleeck and Miss Anderson some time ago, but would like to meet them again for some information on this matter; to think that a Government official would try to undo all the work we have done in Philadelphia is some surprise. We sure do have to watch these one dollar a year men. I shall write you as soon as I get in touch with the situation." Sincerely and cordially, gitized for FRASER ps://fraser.stlouisfed.org