

THE PLACE OF SPECIFIC PROCUREMENT PLANS IN THE
WORK OF THE OFFICE OF THE ASSISTANT SECRETARY OF WAR.

Purpose of Talk

For several months now we have been studying the subject of Industrial Mobilization. That subject in itself is very broad and comprehensive. We have taken up the work of the War Department by parts, studying the organization and functions of the General Staff, the Supply Branches, and the Office of the Assistant Secretary of War. We have had lectures on these subjects and have also studied in detail the work of the Commodities Division, the Allocation, Priorities, Conservation, Price Control, Progress and Requirements Sections of the Office. Soon we will take up the work of the other sections such as Power, Labor, Transportation, Communications, Fuel. The early lectures covering the work of the Office were general in character and necessarily contained matters with which you were entirely unacquainted.

Some time ago one of the students suggested that a lecture be given to show the inter-relation of the various sections of the Office and their relation with respect to the specific procurement plans that are being prepared. This task fell to me. In doing so I will first give a little history of how the present organization was reached, an outline of the basic principles upon which that organization was founded, and finally, by concrete examples, show the functioning of the Office with respect to plans for control of industry and specific procurement plans for obtaining finished products and raw materials.

How the Office Grew

In 1920 Congress passed the National Defense Act creating the Office of the Assistant Secretary of War and for the first time giving him important statutory duties. You all know Section 5-a of the Act verbatim, so I will not repeat it. In this I will be original for scarcely a paper has left the Office in the past six years that has not contained the words " * * The Assistant Secretary of War, under the direction of the Secretary of War, shall be charged, etc". If you will just keep the two duties outlined therein in mind, I'll not repeat them. The Harbord Board outlined in more detail the duties of the Office. These were later defined in G.O. 41, 1921, and Army Regulations 5-5 and 5-10. But even before this Colonel Ferguson and a few officers had been at work and had arrived at certain conclusions. I would like to quote from Colonel Ferguson's lecture at the Army War College in December, 1926:

"When G.O. 41 was agreed upon, we went to work on our share of the problem. I have here the first report of Mr. Wainwright to Mr. Weeks, dated August 15, 1921, which reads in part as follows:

'The duty of this office pertaining to assurance of adequate provision for industrial mobilization to meet war needs, presents two problems:

- '(1) The first problem is to provide for any emergency that may occur in the immediate future.
- '(2) The second problem is to supervise the development of a thorough plan.'

'Attached to this report was a tentative war organization of Office of the Assistant Secretary of War and list of selected personnel. Also, a list of the various super-agencies and list of personnel. It is a fairly complete paper. That stop-gap plan was completed by our office, August 15th, 1921. General Order #41, in which the duties of our office were promulgated to the Army, was dated August 16, 1921; that is, the organization plan was prepared while the order was being published. I am trying to emphasize the fact that by simply making a chart or organization table you have only the starting point, you have just put down the first stake in your survey".

An Organization Chart

Those remarks indicate pretty clearly the broad aim of our Office and its views on the subject of organization charts. For several years the office was so small that no chart was necessary and none was followed. Each officer gradually came to follow certain lines of work which were closely related to each other but it was not until January 15, 1924, that an organization chart was approved. In the mean time war games were being held in the Planning Branch and in the Supply Branches during which all sorts of difficult questions were raised. These games revealed the need for sections or officers to handle certain classes of problems. Consequently, after thorough study, the present war chart - which also is a peace organization of the Planning Branch - was drawn up and approved June 1, 1925. As I was on the board that recommended it, I would like to summarize some of the considerations that led to its adoption.

Considerations leading to Present Organization Chart

(a) First, we felt that the war organization should be an expansion of an existing organization rather than the creation of a new one.

(b) Second, we felt that there would be a period after M-day when the office would have to exercise some limited control over industry pending the establishment of other control agencies. Hence it was apparent that the organization should be such that the office could go ahead exercising the voluntary and cooperative measures permitted to it by law and then be in a position to furnish complete information and perhaps a nucleus of personnel to any other agency if and when set up. Also the organization had to be drawn so that after such agencies were established, the Office of the Assistant Secretary of War could continue coordinating the work of the supply branches and become the liaison between the Army and the outside agencies.

(c) Third, that a section should be provided to handle any major question that might be put up to the Assistant Secretary of War.

A Broad Picture of Industrial Organization

Let me digress at this point and try to give a picture of this whole thing we call Industrial Mobilization. Primarily, of course, we have two purposes in our planning - one leading to the proper supervision of the procurement of supplies for the Army in time of war, and the other leading to the assurance of adequate provision for the mobilization of materiel and industrial organizations essential to war time needs. The picture as devised by Colonel Ferguson many years ago covers both of these functions. It is in the form of a chart, occupying the entire wall of Major Nix's office. It, in turn, is covered up by many other charts, perhaps of more value. I have put on the board two similar charts to illustrate the points covered by Colonel Ferguson.

Chart I

The first of these is rectangular in shape, showing in the first column (1) eight occupational groups as given by the Bureau of the Census. These groups include all persons in the United States gainfully employed. In the other columns are indicated (2) the number of establishments; (3) persons employed; materials required, both (4) domestic, and (5) foreign; (6) materials produced or work accomplished; (7) installed Horse-Power; (8) transportation, (9) capital invested; and (10) communications. Other columns might be

added. By drawing the lines between the columns for each of the eight groups we have rectangles formed each of which could represent a problem of each of the major occupational groups. For example, under Agriculture, we could study the number of farms in the country, the number of persons employed, we could determine the materials of foreign or domestic origin required to carry on the agriculture of the country, or under manufacturing we could make a study of the number of establishments, their size, importance and class of work accomplished. The problem in one block alone would require years of study for complete solution.

Goal of our Industrial Planning

In general, we might say that the purpose of industrial mobilization is to solve the problems of each of these blocks and to plan so that making any necessary adjustments in one will not adversely affect the others. From agriculture, mining, manufacturing, transportation, trade, professional, domestic and clerical forces indicated along these horizontal lines, some men, materials, transportation, power and capital would have to be drawn and turned over to the blocks under public service, that is the Army, the Navy, and other public employment leading to the efficient prosecution of a war. This drawing away from normal civilian pursuits to public service would have to be done with the least possible dislocation of industry, especially of those industries essential to the war. We would then have to replace these with others drawn from the less essential of the civilian occupations. Perhaps some could come without serious loss from the group designated as "Domestic and Personal"; for example, from the 216,211 "barbers, hair dressers and manicurists" or from the 24,897 "billard rooms, dance halls, skating rinks, etc. keepers" mentioned in the Census.

Chart II

The second chart goes into a little more detail in the studies or plans that particularly concern the procurement of war time supplies. Colonel Ferguson, for years, had the feeling that all the supplies of each of the branches could be classified into, say, ten groups each. This classification could be in accordance with any arbitrary grouping as desired by the branch but would include somewhere within the ten groups every finished article required by the branch. Each branch would also require an administrative plan covering the organization of that for procurement. His chart had columns for each of the supply branches, for the Navy, for the other Government Departments, for the civilian needs, for the Office of the Assistant Secretary of War, and columns marked Resources, Plans for Federal Control of Industry and Plans for Private Control. Under the column

"Resources", I have changed Colonel Ferguson's arrangement somewhat. In it there are now placed various headings giving the resources or elements entering in procurement plans. Some of these are personnel, raw materials, manufacturers - under which are listed the sixteen groups as given by the Census, Power, Labor, Transportation and Funds. Others might be added and these expanded. Drawing the horizontal and vertical lines, we obtain small rectangles. Let us take up one of these problems as arising in a supply branch and carry it through to various points. Let us take photographic supplies as required by the Signal Corps. The plan for the procurement of photographic supplies must include personnel to write the specifications and to do the purchasing and inspection. Raw materials will be required; manufacturing plants must be on hand or be built; power and labor will be required in the manufacture of the items; transportation must be provided for the raw materials into the factory and the finished products out. Thus we can go all the way down the column under the Signal Corps group, considering each of the elements involved in the problem. The Chief Signal Officer may have done his part well and yet he is not assured - nor is the Assistant Secretary - that all the photographic supplies will be produced in the time and quantity required for a major operation. Many of the other branches may have conflicting demands. For example, Camphor - which is one of our raw materials - may be short. The Quartermaster Corps, Engineers, Medical Corps, Navy and civilian population require camphor. Federal control may be necessary. A plan for camphor must be worked up. The chart shows the assembly of all of these requirements along the line opposite camphor. Or, let us take opposite manufacturers. Photographic apparatus and supplies fall under the Miscellaneous group of manufacturers. Our studies opposite this miscellaneous group will indicate that the manufacturers of photographic apparatus and materials are set aside for the Chief Signal Officer. In the same way we could go down and show the necessity for consolidated plans for Transportation, Power, Labor, etc. The chart in general shows the plans required by each agency - thus, the Navy may be primarily interested in shipping, the Assistant Secretary of War might be charged with preparing the plans for transportation, power or raw materials, or in certain cases he might have delegated the duty of preparing a plan to one of the supply branches. Finally plans for the federal or private control of each of the industries are produced, such plans being made up of well coordinated branch plans drawn in such a way that all points of conflict have been eliminated between the interested parties.

A Picture - Not an Accomplished Fact

It is a wonderfully broad picture of what the office would like to have in the way of industrial mobilization plans. Unfortunately it has not been accomplished. In the first place the branches

have had extreme difficulty in forming group procurement plans; secondly, the plans for the control of coordination of raw materials, of power, transportation, etc., could not be held up until all specific procurement plans had been prepared. Finally, the Assistant Secretary of War has no authority over the Navy or other Government agencies with respect to industrial mobilization. Through cooperation, much has been obtained from the other Government agencies and from various statistical sources, much information of the civilian needs has been gathered enabling him to make some of the plans desired. In other cases it has been found impossible; hence we must admit that these two charts are mere pictures of what we would have liked to do and not what we have done.

Chart III

We may now return to a consideration of the Organization Chart of the Office. It will be noted that the four main divisions of the office contain in their various sections all of the functions outlined above.

Under the Administrative Division fall those functions pertaining to the administration of the office and the coordination of many of the duties of the branches.

Under the Commodities Division fall the functions pertaining to raw materials and industrial groups. Lack of personnel has prevented the study of all the industries for which the organization is planned. For example, the Commodity Committee on electrical machinery and supplies is not active at the present time, its functions are provided for and in time of war could promptly be handled by the creation of an active committee. This committee, when formed, would have direct contact with one of the industrial groups indicated on Chart II.

Under the Procurement Control Division fall those functions necessary in the coordination and control of Army purchasing and in making studies of the control of industry.

Under the Industrial Division are grouped those duties of a general nature pertaining to the industrial side of a procurement program.

Sections are Embryo Industrial Control Agencies

All of the last eleven sections indicated are busy in gathering information which would be of value to any organization set up to control industry in time of war. They are, in fact, embryo industrial control agencies with absolutely no authority at the present time to control anything. The sections, from time to time,

call upon the branches for information and direct their work with respect to the computation of requirements and pass upon control measures recommended by the branches in specific procurement plans in reference to their particular subjects, but actually exercise no control. Later I will give the procedure of the sections with respect to procurement plans and will take specific examples to illustrate how each section might be required to handle particular problems in time of war.

Specific Procurement Plans

We then come to specific procurement plans. We have, in fact, four sorts of plans; first - the specific procurement plans for finished products; second - specific procurement plans for raw materials; third - plans for the control of certain industries; and fourth - administrative plans.

Finished Products

I will first take up the specific procurement plan for finished products. The primary purpose of a procurement plan is to provide in time of peace a directive to be followed at the outbreak of and during an emergency which will facilitate the prompt and orderly procurement of the item. On May 6, 1927, the Assistant Secretary of War issued instructions to the Supply Branches on the preparation of these plans. (This letter and Check List accompanying are included as Appendix I. Read letter and paragraph 1 of Check list).

This Check List, with which you are all familiar, states that in the preparation of specific procurement plans consideration should be given not only to the minimum requirements of such a plan but to many other points. I will not take time to review them. Not every plan will include all of these points. Attention should, however, be given to coordination with Naval, industrial and civilian needs and coordination with other plans for related items. Thus, in the procurement plan for water purification units, the Chief of Engineers should assure himself that his needs for Class B chassis are receiving the consideration of the Quartermaster General. This coordination should originate with the agency preparing the plan, but it becomes the primary duty of the Assistant Secretary of War to check such coordination.

Raw Material Plans

There are two memorandums to the Chiefs of all Supply Branches which are essential to the understanding of raw material procurement plans. These are dated June 30, 1927, and October 20, 1927. (See Appendices II and III).

The plans for the procurement of raw materials are really not strictly procurement plans. They verge considerably into what might be termed studies as to the control of industries. The War Department defines the strategic raw material as one that is essential, for an adequate supply of which we are dependent wholly or in part upon importations from abroad and for which there is no domestic substitute yet known. Up to the present time the attention of the office has been directed primarily upon these strategic raw materials. Requirements in some of the other raw materials, such as steel and petroleum, have been computed but many of the others such as lead, zinc, and alcohol, have not been touched. Hence, in speaking of our plans for the procurement of raw materials it is necessary to remember that only the strategic ones have received much attention.

Industrial Plans

The third class of plans is not as fully developed in scope as the ones mentioned above for strategic raw materials. These plans are those which must be made for the control of transportation, power, labor, capital and war trade. Their preparation is really the duty of the Planning Branch. Some progress has been made. A plan for the control of the railroads in time of war has received the approval of the President and the Association of Railway Executives. A plan for the coordination of the electric power industry was presented by the Secretary of War at the National Electric Light Association Convention last June. Studies have been made on the other subjects but no plans definitely promulgated.

Administrative Plans

The fourth class of plans which, in fact, was the first developed, includes the plans for the organization, both within the Army and without, for the procurement of supplies and for the control of industry in time of war. These include the "stop-gap" plan referred to by Colonel Ferguson in his lecture at the War College. They provide for the re-establishment of many of the organizations found essential in the control of industry during the World War. The other plans really comprise the information which is being gathered to put into the hands of these organizations in case the necessity for their creation arises.

Examples

Let us now consider some specific examples to show the relation of the sections of the Office with specific procurement plans. I have chosen the plan for shoes, submitted by the Quartermaster Corps.

Shoe Plan

The procurement of shoes constitutes one of the major problems of the Quartermaster Corps. Some twenty-six million pairs are required the first year of a major emergency and, consequently, the Quartermaster General is justified in going to considerable expense and trouble in preparing a complete plan to procure this item. Under one cover he has included sufficient information with respect to shoes and the manufacturing facilities to enable an untrained procurement officer to purchase the Army shoes in accordance with proper specifications, with the correct tariff, and without overloading any of the shoe manufacturers of the country. The form used in this plan is employed in all the plans submitted by the Quartermaster Corps. The general headings are:

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| Specifications. | Apportionment of New Requirements to Procurement Districts. |
| Lasts, Patterns and Cutting Dies. | Accepted Schedules of Production. |
| Bill of Materials. | Deficiency and Substitutes available to meet Deficiency. |
| Flow Sheet of Manufacture. | Requirements & Prod'n Curves. |
| Strategic Raw Materials. | Factory Plans. |
| Tariff of Sizes. | Financial. |
| Inspection & Delivery. | Transportation. |
| Requirements. | Power. |
| Resources under Control of War Department. | Labor. |
| Net Requirements for Procurement. | Priority. |

Important Purposes

Such a plan serves several important purposes. First, it assures the Quartermaster Corps that even with the great turnover of personnel expected in time of war that his officers can act rapidly and intelligently in the procurement of shoes. Second, that the Accepted Schedules of Production have been placed with the shoe manufacturers and they can expect at least a share of Government orders in time of war. Third, that the requirements in strategic raw materials have been computed and can be included in a general plan for the procurement of those commodities. Fourth, that the indirect requirements, such as power, labor, funds and transportation, have been considered and may be extracted and made part of general plans covering those elements.

Hides

It will be noted that the strategic raw materials listed are cowhides, steerhides, sheepskins and chromium.

This, then, brings us to the procurement plan for hides. This plan covers all of the points mentioned in the letter of June 30, 1927. It consolidates the requirements of leather from the seven Supply Branches for all of the items containing leather and covers all the points given in the Check List. One point should be especially considered; that is, that a list in order of relative essentiality by branch of the essential items is included. In brief, this plan, which by the way differs from the control plans for many of the other materials, places the entire hide tanning materials, leather and leather goods industries, under the control of the Hides Tanning and Leather Administration, to be organized as a unit of the Quartermaster Corps.

Action of Assistant Secretary of War.

This feature of the plan was not approved by the Assistant Secretary of War, who stated that it was not believed "that the President * * would take over those industries and have them operated as an independent unit by any Department of the Government, much less by a bureau of the War Department". I mention this to show that the approval of the Assistant Secretary of War is not and cannot be always given to all plans. In this particular case he merely directed that the plan be revised, presumably in accordance with the comments made in his letter. This also brings out the point that the execution of any of the strategic raw material plans is by the agency mentioned in the plan itself. In some cases this may be a Supply Branch - in other cases an agency set up in accordance with the recommendations contained in the plan. Since at the present time there is no legal authority for the Assistant Secretary of War or a Chief of Branch to exercise any control whatsoever over industry at large, or over other branches of the Government, plans drawn giving the Chief of Branch the power to do certain things must be in accordance with existing law, or supported by proposed legislation which would permit the action recommended.

Tanning Materials.

Tanning materials are now considered critical materials and the plan for their procurement is in a slightly different form from those for the strategic raw materials. It, however, contains, and very properly, a list of persons and organizations with which the Commodity Committees on these materials would have to get in touch in time of war. The knowledge of the proper person to see on the outbreak of an emergency is one which should not be overlooked in any of our work.

Primary Batteries.

As an example of a different type of procurement plan, I would like to show you the one for primary batteries and accessor-

ies. This plan, prepared by the Signal Corps, is very complete. It is really a group plan in that ten types of batteries are included. It contains, in general, the same subjects as covered by the Quartermaster plans, but has gone further into certain of the elements and in some cases the work has been carried to an extreme.

Action of the Office of the Assistant Secretary of War on Plans

The action of the office of the Assistant Secretary of War on these plans is very simple, but we believe very thorough. We have handled many of them and finally a good many policies have been developed. The plans usually raise more or less the same questions; consequently when a specific procurement plan is received it goes to the Requirements and Progress Section, if for a finished article, and to the Commodities Division if for a raw material. There the plans are carefully reviewed and a draft of a letter prepared. This draft, together with the plan, is then circulated through the Planning Branch where it is studied by each of the officers concerned with respect to certain elements, such as power, transportation, labor, conservation, allocations, etc. In this way an officer who is thoroughly familiar with his particular subject reviews the plan. It then receives the careful consideration of the Chief of the Planning Branch and the Director of Procurement. The comment when finally leaving the office is the comment of the Assistant Secretary of War and not that of any particular officer or section.

Examples from War Games

As a final explanation of the work of the office, I would like to take two examples from some of our war games which illustrate the points which I have tried to bring out above. In one game we had an assumed condition where the first and second procurement districts were lost to the enemy. The General Staff notified the Assistant Secretary of War of the plan to withdraw from these two districts. He estimated that the Boston District would be lost in one week and the entire Bridgeport District within three weeks. The actions of the Assistant Secretary of War in the case were required. Let us see how it was handled. Boston is the center of the shoe industry. Its loss meant a serious complication. Bridgeport was the center of the brass and bronze industry, essential to the Ordnance in the production of small arms and automatic weapons. A conference was called of the Chiefs of divisions and Sections of the Office, together with the liaison officers from the Supply Branches. The question of shoes was first taken up; the Quartermaster representative turning to his specific procurement plan for shoes discovered that he had sufficient plants already allocated in other districts to take care of the curtailment caused

by the report. He was ordered to do this, and proceeded without further allocation of facilities. This shows the necessity of the Allocation Section. However, the stocks of leather in New England were required and the Chief of the Commodities Division informed the Quartermaster representative of the desirability of shipping all stocks of hides, leather and tanning materials from the district. The Transportation Section was directed to obtain the proper priorities for the shipment of these goods. This he proceeded to do by informal conference with G-4 and the American Railway Association representative, who was on duty in the office of the Chief of Transportation. The Chief of Transportation promulgated the order as directed by the War Department.

The situation in the Bridgeport District was not so simple. The Chief of Ordnance stated that over forty percent of the production of small arms ammunition and much of the automatic weapons production had been allocated to the Bridgeport District and that if forced to withdraw therefrom production would be delayed many months. He stated that around Cincinnati certain machine shops could be converted. The Labor Section estimated that sufficient skilled labor could be obtained there to proceed with the production of the ammunition and automatics. He was uncertain, however, as to the power supply in that territory. The Power Section gave the information that sufficient power was available, or could be made available through interconnection with the area around Columbus, and with the recent development at Louisville. However, the Power Section took steps to notify the officer in charge of the power zone in Pittsburgh of the contemplated movement and establishment of the new factories in the Cincinnati area. He estimated that this shift would increase the load in the vicinity of Cincinnati forty thousand horsepower and directed him to recommend any steps which might be necessary to assure the supply of power. It was also decided that the machine tools in the Bridgeport District should be moved out as promptly as possible. The Chief of Ordnance was directed to prepare a priority list of his part of the movement. The Transportation Section coordinated this with the demands of the other branches and then with the General Staff and the American Railway Association prepared necessary instructions. The American Railway Association gave assurance of an adequate number of cars for this movement. The Chief of Ordnance was directed to submit to the Machine Tool Commodity Committee a list of the new machine tools required to meet the emergency.

Summary

To summarize, I wish to emphasize that the Office of the Assistant Secretary of War first prepared a plan which could

promptly be put into effect at any time the emergency arose with the information at hand; it next started in energetically to gather information along many lines; that on certain of these lines it met conditions which prevented further progress until other basic work could be done - such as the preparation of Tables of Organization of the units of the Army, the Tables of Equipment and a General Mobilization Plan upon which to base requirements; that it therefore had to start work along other lines and carry them forward as far as possible; and that in this way the fund of basic information has gradually built up, which is evident in our war games. Examples of this progress are seen in our specifications, requirements, our Accepted Schedules of Production placed with facilities already surveyed. It is further manifest in our specific procurement plans with their plainly stated production rates. These rates, in turn, are the basis of computing the war reserves we must obtain if we are to be adequately prepared to meet our Mobilization Plan. With such reserves computed and backed up by actual production rates the Army is ready to place the cards on the table before Congress and ask whether or not we are to be given the money ^{to} provide the reasonable protection the people of the country demand. In accomplishing this, in conjunction with the General Staff, I believe we have made vast progress in real National Preparedness.

(Charts I, II, III;
 Appendices I, II, III
 attached).

CHART TO SHOW THE BROAD INTERRELATION OF INDUSTRY.

Case of Dr. Mining

OCCUPATIONAL GROUPS	NO. OF ESTABLISHMENTS.	PERSONS EMPLOYED.	MATERIALS REQ.		MATERIALS PRODUCED OR WORK ACCOMPLISHED	INSTALLED H.P.	TRANSPORTATION.	CAPITAL INVESTED.	COMMUNICATIONS.
			DOMESTIC	FOREIGN					
AGRICULTURE	FARMS	10,953,158							
MINING	MINES	1,090,223							
MANUFACTURING & MERCHANDISING	ESTABLISHMENTS	12,818,524							
TRANSPORTATION	CARS TRACKS SHIPS	3,063,582							
TRADE	COMPANIES	4,242,979							
PUBLIC SERVICE		770,460							
ARMY									
NAVY									
OTHERS									
PROFESSIONAL	OFFICES	2,143,889							
DOMESTIC AND PERSONAL		3,404,892							
CLERICAL		3,129,541							

ORGANIZATION CHART

OFFICE OF THE ASSISTANT SECRETARY OF WAR



FUNCTIONS OF ASSISTANT SECRETARY OF WAR OTHER THAN PROCUREMENT.

1. DIRECTOR OF PROCUREMENT
1.1 EXECUTIVE ASSISTANT

2. ADMINISTRATIVE DIVISION

2.1	2.2	2.3	2.4	2.5
Miscellaneous Section	Legal Section	Fiscal Section	Training Section	Progress & Requirements Sec

3. COMMODITIES DIVISION

✓ 3.1	WAR DEPARTMENT COMMODITY COMMITTEES (Nos. 1 to 54 inclusive)
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4. PROCUREMENT CONTROL DIV.

4.1 ✓	4.2 ✓	4.3	4.4	4.5
Priority Section	Allocation Section	Price Control Section	Contract Section	Foreign Relations Section

5. INDUSTRIAL DIVISION

5.1	5.2	5.3	5.4	5.5	5.6
Power Section	Labor Section	Transportation & Communication Sec.	Facilities Section	Conservation Section	Fuel Section

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APPROVED: *Single D. D.*
The Assistant Secretary of War,
DATE: June 1st, 1925.