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by

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CURRENT PROCUREMENT METHODS OF THE QUARTERMASTER CORPS

In considering the current procurement methods of the Quartermaster Corps it is well to get a clear conception of the scope and volume of supplies furnished by the Corps, and the composition and distribution of the forces for whom these supplies are maintained.

The duties of the Quartermaster Corps are prescribed by Congress in the National Defense Act, which charges it in general with the major portions of all duties pertaining to supply, transportation, and construction for the Army.

As a result, Quartermaster supplies cover a wide range of commodities and include everything required by the Army except supplies of a technical nature assigned to other services for procurement, storage and issue. Included in this commodity range are subsistence, forage, fuel, clothing, equipage, animals, animal drawn vehicles, harness and saddlery, motor vehicles and accessories, supplies for boats and transports, building materials, hardware, tools, both machine and hand tools, machinery of all kinds, electrical supplies and equipment, stationery and office supplies, and such other supplies of a miscellaneous nature as may be required by the Army.

During times of peace they represent over fifty percent of all supplies procured by the Army when measured in money value. In war, the percentage of expenditures may be less, but in bulk and variety they far exceed those procured by any other service. The actual value

of purchases made during the fiscal year 1936 was \$192,006,702.62.

These purchases were made at over 500 different places and necessitated the issuance of 5,177 formal contracts and 609,572 purchase orders. By commodities, the break down in money value was as follows

Subsistence	\$80,043,697.25
Forage	3,096,616.00
Fuel	7,516,061.04
Clothing	50,383,344.00
Equipage	25,231,647.00
Regular Supplies	5,653,344.00
Motor Vehicles & Accessories	16,186,436.57
Supplies for Boats	268,882.00
Construction Materials and Supplies	2,812,861.04
Miscellaneous	<u>813,813.72</u>
TOTAL -	\$ 192,006,702.62

In any discussion of procurement methods it is necessary to consider also the scheme of distribution since procurement and distribution are so closely related that one is inseparable from the other.

The scheme of distribution is necessarily dependent upon the strength and location of the forces to be supplied. These include the Regular Army, with an authorized strength of 165,000 men, and 6,000

Philippine Scouts stationed at over 200 posts and stations throughout the United States and its possessions; the National Guard, with an authorized strength of 175,000 men at over 1700 different stations throughout continental United States, Puerto Rico, and Hawaii, the R.O.T.C. of 145,000 men at 254 colleges and schools, the C.M.T.C., with an average annual attendance of about 30,000 men trained at 47 training camps, and the C.C.C., with a present strength of about 475,000 men at over 2400 camps. This amounts to a total of approximately 1,000,000 men. While all of these men are not on active duty at all times, they are all on duty at some time or other during each year and must be provided for. The present daily strength on active duty is roughly 650,000, which represents a fairly good sized Army.

The National Defense Act, which prescribes the duties of the Corps, indicates its logical organization along functional lines into three main divisions, viz supply, transportation, and construction.

In considering the supply organization of the Quartermaster Corps, as well as all other supply services, the provisions of Section 5 a of the National Defense Act must be borne in mind. This section charges the Assistant Secretary of War with the supervision of the procurement of all military supplies and other business of the War Department pertaining thereto, and the adequate provision for the mobilization of material and industrial organizations essential to war-time needs, and directs that chiefs of branches of the Army charged with procurement of

supplies for the Army shall report direct to the Assistant Secretary of War regarding all matters of procurement.

These provisions of the National Defense Act not only fix the relations of the Quartermaster General to the higher staff echelons of the War Department, but they also have an important bearing on the entire supply organization since matters pertaining to the procurement of supplies are conducted, as directed by the Assistant Secretary of War, while all matters pertaining to storage and distribution are conducted in accordance with directives from the General Staff.

The organization of the Quartermaster Corps for supply conforms to the organization and employment of the Army. The echelons of organization include the office of the Quartermaster General, corps area and department quartermasters, post quartermasters, and for the Civilian Conservation Corps district quartermasters. Supply is effected through stocks maintained at depots, posts, and Civilian Conservation Corps districts, and by purchase. The supply depots, which operate under the direct control of the Quartermaster General, are located throughout the country at places selected with regard to the location of the troops which they supply.

The Army and the Civilian Conservation Corps secure most of their supplies from the five regional distributing depots, which are so located that they serve all stations in continental United States, and also make shipments to the overseas departments. The New York depot

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distributes supplies to the First, Second, Third, and part of the Fourth Corps Areas, the Jeffersonville depot distributes to the Fifth, and part of the Fourth Corps Areas, the Chicago depot distributes to the Sixth, Seventh, and parts of the Ninth Corps Areas; the Eighth Corps Area depot at San Antonio distributes to the Eighth Corps Area, except Colorado and Fort Francis E. Warren, Wyoming, which are supplied from Chicago. The San Francisco Depot distributes to the Ninth Corps Area, except parts of Montana and Wyoming, which are supplied from Chicago. Shipments to the overseas departments are made principally from the New York and San Francisco Depots.

In addition to the regional distributing depots, there are three depots concerned chiefly with the procurement of special supplies. These are the Philadelphia depot, which procures all clothing and most of the equipage, which it distributes in bulk to regional distributing depots, as well as making shipments of outer clothing direct to requisitioning stations, the Holabird depot, which procures motor vehicles and motor transport supplies, the Boston depot, which procures boots and shoes for distribution in bulk to regional distributing depots.

In addition to the active depots, there are certain reserve and inactive depots at which supplies are stored subject to call on order from the Quartermaster General. These are the Schenectady, New Cumberland, and Columbus General Reserve depots, and the Boston and New Orleans Quartermaster depots.

The organization provides for procurement offices in the depots located at Boston, New York, Philadelphia, Holabird, Washington, Jeffersonville, Chicago, St. Louis, San Antonio, San Francisco, and Seattle, as well as for local purchases to be made by corps area and department quartermasters, and by post and district quartermasters.

The organization net is simple but complete. Through the organization for procurement it establishes and maintains contact with regular dealers and with factories producing supplies, and, if necessary, with the producers of raw materials necessary for the production of supplies. Through the storage and distribution organization it controls the volume of supplies, and directs their flow to posts and distributing points so that each individual, wherever located, secures daily the supplies which he needs.

The two main functions of supply are procurement and storage and distribution.

Procurement is a broad term. It includes all matters pertaining to the purchase of supplies and all related matters pertaining to their manufacture, production, inspection, delivery, and acceptance. Procurement is not concerned with requirements, neither is it primarily concerned with specifications. It procures such supplies as have been properly allocated for procurement in accordance with specifications approved by proper authority.

The Quartermaster General's office makes no purchases but it

controls and coordinates all purchases. This is accomplished through the application of definite policies which divide all supplies into four categories for procurement, viz. restricted purchases, centralized purchases, regional purchases and local purchases.

Under these policies certain designated articles and classes of supplies are restricted as to purchase due to limited appropriations, infrequent use, and other reasons, and in each instance the approval of the Quartermaster General must be obtained before a purchase is made.

Articles of the uniform, equipment and equipage, and other articles for which it is desired to maintain uniformity, as well as articles for which the requirements of the whole Army can be advantageously consolidated, are designated for centralized purchase by selected depots. These depots are - Philadelphia for clothing and equipage, medals, badges and insignia, flags, colors and standards, band instruments, and tentage, Boston for boots and shoes, Jeffersonville for animal and hand drawn vehicles, harness, saddlery and pack equipment, stoves, ranges, ovens, cooking outfits, kitchen utensils, mess furniture, china and glassware and tableware, oil lamps, tool chests and tools, Holabird for motor vehicles and accessories, and fire apparatus and equipment, Chicago for furniture and certain articles of the ration, Washington for envelopes, incandescent electric lamps, blank forms, typewriters, adding machines and similar office labor saving devices, San Francisco for Alaska clothing and certain subsistence articles, and New York for horse-shoe nails.

Other articles carried in stock by distributing depots, and supplies of a consumable nature such as non-perishable subsistence, forage, and fuel, are purchased regionally by regional distributing depots. The New York, Chicago, Jeffersonville, Eighth Corps Area, and San Francisco depots are regional distributing depots. They obtain clothing, equipage and other supplies designated for centralized procurement from the depots that purchase them. All other articles required for stock are purchased by these depots. These include stationery and office supplies, cleaning and preserving materials and various articles of a miscellaneous nature.

Articles not carried in stock or designated for depot purchases are purchased locally, as directed by corps area and department commanders.

The present procurement organization is designed for the peacetime needs of the Army. It has not only served the needs of the Regular Army but has absorbed the needs of the Civilian Conservation Corps by the simple expansion of civilian personnel to perform the added labor, clerical, and inspection duties. The number of men now supplied, including the Civilian Conservation Corps, is roughly 650,000, and the volume of purchases now approximates \$200,000,000. per year. During the months of May and June 1933 the system met a severe test when the Army was called upon to organize, equip and place in some 1300 work camps located in all parts of the country a force of 300,000 Civilian Conservation Corps enrollees. Only six weeks was allowed for this purpose. In order to procure the supplies needed by this force the requirements were computed

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in the Quartermaster General's office and allocated for procurement to the depots supplying the mobilization camps. The methods of procurement were not changed but time for advertising and delivery was materially shortened and prompt and early delivery was made the essential point in all contracts. By this simple expedient the necessary supplies were secured in time to meet the organization and troop movement schedule.

The orders issued by the War Department have placed the responsibility for the supply and maintenance of Civilian Conservation Corps camps and personnel largely on the shoulders of the corps area commanders of the corps areas in which the camps are located. All of the clothing and most of the equipment, however, is obtained by centralized procurement. After the supplies necessary for the first enrollment had been obtained, the procedure set out to be followed by the Regular Army was made applicable to the Civilian Conservation Corps, and the procurement of restricted articles was directed by the office of the Quartermaster General and regional purchases made by the proper depots. The greatest expansion of activity due to the Civilian Conservation Corps has occurred at the Philadelphia depot where all of the clothing and tentage has been procured either by purchase or by manufacture in the Philadelphia factory. This depot has performed a most excellent job with a very small increase of over-head expense.

All supplies required by the Government must be purchased in accordance with laws enacted by Congress. Normally, these laws require that all purchases shall be made by advertising a sufficient time in

advance to permit full and free competition and that awards shall be made to the lowest responsible bidder. The basic law concerning the necessity of advertisement and competition is contained in Revised Statutes 3709, which provides that all purchases and contracts for supplies and services shall be made by advertising a sufficient time in advance of the purchase when public exigencies do not require the immediate delivery of the supplies, or performance of the services.

The usual method of advertising is to send invitations for bids to all known prospective bidders. These invitations list the kind, quantity, and quality of the articles to be purchased, show the place and time when they are desired, and the rate of delivery, state the factors that will be considered in making awards, specify the kind of packing, conditions of payment and any other information that may be necessary to inform prospective bidders of the conditions affecting the purchase.

The use of Federal and U. S. Army specifications is mandatory in purchases of all articles covered by such specifications. If there is no published specification for an article, the purchasing officer must either prepare a tentative specification or give such description as will properly describe the quality desired. It is most important that such specifications be prepared so as not to be restrictive and to clearly set forth the grade and quality of the article desired.

Every purchasing office maintains a list of bidders for the supplies which it purchases. These lists are kept current by the addition of new bidders who may be interested in selling to the Government and by deleting from the list bidders who do not respond to invitations to bid or show in other ways that they are not interested. In recent years manufacturers and their agents have shown a keen interest in selling to the Government. This is due in part to the increase in the volume of purchases and also in a large degree to the fact that the Government always pays its bills and pays them promptly.

There have, in the last few years, been certain laws passed by Congress which have necessitated the including of their provisions in invitations for bids for the purpose of assuring compliance with these new laws.

The Domestic Products Law originally was passed in 1932 and required the War Department to purchase within the limits of the United States only articles of the growth, production and manufacture of the United States, unless the excess cost of these articles was found by the Secretary of War to be unreasonable. This law was followed in 1933 by the present Domestic Products Law, which extended its provisions to all Government Departments and independent establishments. As a result of these laws, a certificate is required of bidders that the supplies which they propose to furnish as a result of their bid are of domestic production.

The Procurement Division, Treasury Department, has issued instructions

to all Government procurement agencies that a provision must be included in the invitation for bids and any resulting contract that the prices bid include any Federal Tax imposed by Congress which is applicable to the material on the bid. This provision includes sales tax, processing tax, and any other adjustment charge or tax. Section 401 of the Revenue Act of 1935 provided for tax exemption on purchases of certain articles for the exclusive use of the United States. These articles had been enumerated in Title IV of the Revenue Act of 1932. Among other articles, the following are included in this exemption in which the War Department is especially interested. Tires and inner tubes, automobiles, motorcycles, etc., radio receiving sets, mechanical refrigerators; fire arms, shells and cartridges, gasoline and lubricating oil, and matches.

The Agriculture Adjustment Act of 1933 provided for the Secretary of Agriculture to promulgate certain marketing agreements affecting agricultural products. Invitations for bids and resulting contracts for such products are required to contain provisions by which the contractor agrees to comply with such marketing agreements, whenever applicable to the supplies being purchased.

The last Congress passed the Bituminous Coal Conservation Act of 1935 (known as the Guffey Act). This Act provides for the appointment of a Commission and the setting up of a code for the Bituminous Coal Industry, which code provides for the commission to fix minimum and maximum prices at which bituminous coal may be sold, and further provides

that no bituminous coal shall be purchased by the United States or any department or agency thereof produced at any mine where the producer has not complied with the provisions of the code set out in Section IV of the Act and that each contract made by the United States or any Department or agency thereof with a contractor for any public work or service shall contain a provision that the contractor will buy no bituminous coal to use on or in the carrying out of such contract from any producer except such producer be a member of the code set out in Section IV of this Act, as certified to by the National Bituminous Coal Commission. The invitations for bids and resulting contracts must, therefore, make reference to this law and contain the articles which have been prescribed in Procurement Circular Number 6 of the War Department, November 15, 1935.

In carrying out the provisions of these and other laws enacted to relieve the depression, it has been the constant effort of the Quartermaster Corps to so administer them as to assure compliance with both the letter and the spirit of the laws, and to see to it that money appropriated for the relief of industrial conditions is so expended and distributed as to accomplish this purpose. There can be no doubt that the purchases made by the Corps have contributed largely to the restoration of normal conditions, particularly in the textile, motor, and food industries.

It might be interesting to outline the procedure necessary to be followed before a purchase is actually made Information is received

from the Staff concerning the number of men that it is expected will be enrolled at a certain time. Based upon these figures, the Quartermaster General prepares a program of requirements, giving the quantity and an estimated price of the supplies that it will be necessary to procure. This program is submitted to the General Staff. After approval it is forwarded to the Director, Emergency Conservation Work, who approves the procurement and allocates the necessary funds. After clearance for procurement by the Assistant Secretary of War, the requirements are then forwarded to the proper procuring depot for purchase or manufacture, as the case may be. The procedure for Regular Army purchases is somewhat similar. Naturally, this procedure consumes considerable time.

Upon receipt of a procurement directive by a purchasing office, invitations for bids are prepared and sent to all prospective bidders wherever located throughout the country. Bid bonds are required in connection with bids submitted for purchases of consequence. Bidders are required to state in their bid the names and locations of plants which they propose to use, and to state definitely the production at each plant.

After bids are opened they are abstracted and award is made to the low bidder, provided he is responsible and a manufacturer or regular dealer. Where information as to these factors is not already available to the Contracting Officer, necessary investigations are made to determine them.

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In many instances awards are not made based solely upon the low bid as it appears on the abstract, as various other factors may enter into the award, such as cost of freight from quartermaster depot to contractor's plant when Government material is furnished, relative cost of maintaining inspectors, and other factors stated in the invitation. In times of great stress such as at the beginning of procurement for the Civilian Conservation Corps, a certain evaluation was placed upon speedy delivery. A variation of 3% is usually allowed from the specific quantity stated in the contract, except where Government material is involved in which case no variation is permitted.

Usually liquidated damages in amount of one-fifth of one percent for each day's delay in delivery by the contractor are provided for the undelivered balance outstanding at any time after each scheduled delivery date.

For all contracts amounting to more than \$25,000., or where the delivery extends over a period greater than sixty days, a bond is secured from the contractor to protect the Government's interest with respect to any materials furnished, or failure of the contractor to perform in accordance with the terms of the contract.

After award has been made and bond furnished by contractor, and he has notified the depot that he is ready to begin operations, an inspector is sent to contractor's plant. In cases where Government material is supplied contractors, a property man is also assigned to contractor's plant. His specific duties are to account for all Government material and see that no loss thereof is sustained by the Government in connection with the contract.

In the meantime patterns, drawings, specifications, and samples have been forwarded to the contractor.

At the Philadelphia depot, where the bulk of clothing and equipage is bought, the position of the contracting officer is rather peculiar in that while he controls the actual making of contracts, he only controls the acceptance of supplies procured thereunder at the Philadelphia depot. Responsibility for the acceptance of supplies received at New York, Jeffersonville, Chicago, San Antonio, and San Francisco rests solely upon the receiving officers at those depots. The contracting officer at Philadelphia does, however, have charge of the Government inspectors stationed at all contractor's plants, but these inspectors do not have the authority to accept or reject goods, except where supplies are bought f.o.b. factory and shipped on Government bill of lading.

Inspectors at contractors' plants can only give advice to the contractor since responsibility rests solely on the contractor but they keep the home office informed as to deficiencies found in products shipped from the contractor's plants. Such information is investigated and if deemed of sufficient importance, is relayed to the particular depots which are actually to receive the supplies in question.

In addition, samples of both raw materials and finished articles are secured by inspectors from contractors' plants and forwarded to the Philadelphia depot, where they are tested and analyzed in the depot's laboratory and by experts with respect to workmanship and other factors

which cannot be determined in the laboratory. Samples of component materials are tested or examined by experts to determine what the leather, the wool, the cotton, the cloth or other component, or raw material consists of, and the contractor is notified as to the acceptability of the particular sample. A copy of the depot's findings is sent to each depot which is to receive any of the materials produced under the contract.

Thus, by the two means enumerated above, depots receiving any of the supplies have information as to what our inspectors in the field think of the quality of the supplies shipped to them, as well as the results of the laboratory reports from the Philadelphia depot. Such depots, even though without technical personnel, have at least a fair idea of what to expect in shipments, and are in a position to act intelligently upon deliveries received.

A word might be spoken here of the extreme difficulty we have had during peace-time (when several million men are out of work), in obtaining the proper calibre of inspectors. Probably not 10% of the applicants for positions, even though their past experience shows that they should be properly qualified, are actually found to possess the qualifications necessary to properly represent the Government in a contractor's factory. If such a condition obtains at this time how much more difficult will it be to obtain properly qualified inspectors in an emergency when the man power of the Nation will be fully engaged in military and civilian pursuits. It, therefore, occurs to me that

probably the first and most important step in connection with inspection in event of war, will be to organize the schools called for in the War Plan for the proper training of inspectors. This has been found absolutely necessary during the last two and a half years and even in this case we have not always found men who can perform their duties with a sufficient degree of intelligence to fully protect the interests of the Government. In case of war we will not be so fortunate as to be able to ship the major portion of the supplies to the depots and inspect them there. Most inspection will have to be at the factory of the contractor, and in order to hold the quality up to anything like a reasonable standard, the utmost attention to the question of inspection at such factories will be necessary.

While it would seem that a business man would be loath to take a Government contract unless he were sure that he could perform according to the terms thereof, it has been found during the last two and a half years that business men do frequently take such contracts without due consideration, and without the knowledge or the facilities to properly perform. I have in mind a case which we only disposed of recently whereby a man took a contract for 10,000 blankets without having seen one of the blankets, without having the proper machinery to make such a blanket and based on no better estimate of cost than looking up bids which were received on the same type of article in the past, and then making his bid accordingly. The case in question was disposed

of by cancellation of the man's contract without his having produced a single acceptable blanket and with probably a resultant cost to him in liquidated damages and excess price paid for blankets purchased against his account of from \$10,000 to \$25,000, which will probably result in the closing of his mill through bankruptcy action.

Another case occurred a few days ago wherein we were purchasing socks on a specification on which the weight varied from that used in the previous specification. A contractor bid without taking into consideration the increased weight and knitted up the whole contract before he found out that the weights were incorrect. He admitted that he had not even read the specification.

We have been further particularly concerned about the number of woolen cloth manufacturers who have taken on Government contracts for cloths. Due to the large quantities being purchased, the contractors apparently were of the opinion that the same quality of material which was accepted during the war would be accepted under present conditions. Many of them have lacked the necessary technical personnel and the proper machinery with which to produce the cloth bid upon. This was particularly true of the smaller mills, and when such contractors found that they were actually expected and in fact required to deliver cloth fully meeting the specification requirements as to shade, texture, weight, strength and other features, they were largely unable to do so, and rejections amounted to serious proportions.

Final inspection is made by the six receiving depots, each of which makes weekly reports to the Philadelphia depot, showing for each contract the quantities received, the quantities inspected, and the percentages rejected. This information is compiled in a consolidated report, a copy of which is sent to all depots. These reports are useful for purposes of comparison. Graphic charts are also sent to all depots showing percentages of rejections by each depot for certain items and for all items combined.

The Philadelphia depot also receives reports of shipments from contractors, and reports of goods actually accepted from the depot concerned. A graphic chart is maintained for each important contract on which the delivery schedule is shown and on which actual deliveries are plotted from day to day.

In a few isolated cases where contractors are seriously delinquent and the needs of the Government for the supplies in question are urgent, contracts are either reduced or cancelled outright. In such event, quotations are obtained by long distance telephone (which are confirmed in writing) from three or more manufacturers, and procurement is made at the lowest quotations obtainable. Excess costs, if any, are charged to the defaulting contractor.

Contractors are sometimes delayed due to strikes, epidemics, floods, or other reasons beyond their control. In such cases liquidated damages are computed and have heretofore been deducted from payments due contractors. Until recently it has been necessary for contractors to file

claims with the Comptroller General for remission of liquidated damages assessed under these conditions. However, the new standard contract, which is now being used, delegates authority to the contracting officer to determine the nature and extent of alleged delays, and authorizes him to grant extensions under the contingencies stated. This will serve to prevent assessment and deduction of liquidated damage charges from contractors in many instances, thereby reducing the number of claims against the United States for their remission.

Generally speaking, other delinquencies in deliveries under contracts are due to the following causes

- 1 Failure to study and understand the conditions and requirements of the invitation and specifications.
- 2. Delay in getting production over that calculated by contractor
- 3 Unforeseen difficulties during manufacturing, operations, including mismanagement in the procurement of suitable raw materials.
- 4. Overbidding by a contractor
 - a Wilfully, with a charge included in his bid price to offset contemplated liquidated damages.
 - b Over-estimating his production possibilities
 - c Depending on sub-contractors without binding agreements with them

- d Bidding blindly with the expectation that material and findings can be obtained and later finding that same are not readily available on the market.
- e Setting Government orders aside, giving priority to commercial business
- f Bidding upon articles not ordinarily produced.
- g Excessive rejections due to faulty production.
- h Incability to finance production

Purchasing officers have a difficult office to fill. They are judged by bidders and by the Army by their ability as business men. They must be thoroughly familiar with regulations and procedure governing Government purchases and apply them in such a way as to achieve the best results for the Government. They must also be familiar with commercial procedure and practice and have as detailed knowledge as possible of the commodities they purchase. They are in daily contact with salesmen who are thoroughly informed of the products they have to sell and with the products of their competitors and if the purchasing officer does not also have a fair knowledge of these products he is apt to be misled with the result that he does not get the best and most suitable article. In dealing with bidders and contractors the purchasing officer must be fair, just, and impartial. Reliable business firms conform to a high code of ethics and do not as a rule countenance anything bordering on sharp practice. If a purchasing officer is to

obtain the best results, he must conduct all transactions on a high plane, and keep his office above suspicion of anything approaching unfairness. He must be able to make a good bargain for the Government but he must also give bidders and contractors a square deal.

As previously stated, Quartermaster supplies cover practically the entire range of industry. Due largely to this fact, there can be no rigid uniformity in the methods of procurement of the various commodity lines but each must be so planned as to conform to the production, distribution, and merchandising arrangements found to exist in industrial and commercial life. It may be of interest to consider in greater detail some of these various commodity arrangements.

The commodity line representing the greatest expenditure in money value, as well as the greatest bulk both in peace and war, is subsistence. Prior to the establishment of the Civilian Conservation Corps the annual expenditure for subsistence was about \$19,000,000. For the fiscal year 1935 this amount was \$80,000,000. The 1936 estimate is \$110,000,000.

For procurement purposes subsistence is divided into two classes - viz perishable and non-perishable supplies.

Perishable supplies, which include fresh meats, meat products, fresh fish, sea foods, eggs, poultry, milk and dairy products, potatoes, onions, and other fresh products, are contracted for on monthly indefinite quantity contracts at each post and station, calls being made

on contractors daily, or as these perishable articles are required. This method of procurement has been in effect for many years and has been extended to the greatest extent practicable due to the success experienced. It assures the delivery of perishable food items if and when desired by troops and patrons of the sales stores at prices which are fixed for the entire month. There is no necessity of stocking large quantities of highly perishable items, and hence there are no losses through deterioration in their handling. It is optional with post commanders whether troops purchase their own fresh fruits and fresh vegetables or whether they shall be purchased by post quartermasters on monthly indefinite quantity contracts. This is due to the daily fluctuation of prices of fresh fruits and vegetables. If purchased by the quartermaster, they are purchased as exceptional articles and the customer must take them at the price paid by the quartermaster.

Non-perishable articles of the ration and some sales articles are purchased quarterly by the regional distributing depots. The commissary system is so arranged that money is not tied up in stock which remains indefinitely in the warehouse or on the shelves of sales stores, and there is a very small loss through deterioration of supplies.

Canned meats, such as bacon, corned beef, and corned beef hash, are purchased annually by the Chief of Depot at a time when shipments of the types of hogs and carner cattle are on the market. Best prices are obtained in this manner and the canned meats can be safely stored

at the posts and stations with slight losses.

Canned tomatoes are purchased annually at the canning season when the opening price for the season is announced. The Army is a large user of canned tomatoes and experience has shown that considerable saving can be made by the annual purchase of this article. The contractor guarantees against spoilage for six months, and the Government carries the risk for another six months with little loss. Purchases are made at all distributing depots due to the fact that many sections produce canned tomatoes.

Experiments have been made with other subsistence articles on an annual purchase basis but they have not proven to represent any material savings, and the resulting stocks on hand represent funds tied up. Our experience has been that prices very often are lower during the year than the opening prices for the various canned products, and in those cases the Army has found itself with large stocks on hand at prices in excess of current market quotations. The Army is on the same basis as any other wholesale grocer. If its prices are too high the troops and patrons of sales stores buy their articles at places where they can be obtained cheaper, and supplies on hand do not move.

The sales stores carry a large assortment of goods for resale purposes. With the approval of the Comptroller General, these resale articles may be purchased by brand or trade names since they are resold at the contract prices and the Government takes little or no loss. For

of this subject will bring this matter more forcibly to your attention.

I have covered the subject of clothing in considerable detail in describing the operations of the Philadelphia depot. Our experience during the past two years has indicated the value of a technically trained centralized force to make decisions on technical points connected with procurement. Such a force will be found indispensable in war.

Stationery, cleaning and preserving materials, and sanitary supplies are handled on a budget basis. Each corps area and department is given a money credit each year against which they may draw the supplies that they require. Most of these supplies are purchased semi-annually by the regional distributing depots although provision is made for the local purchase of occasional articles, which are not carried in stock by depots.

From time to time the Quartermaster Corps is called upon to supply an infinite variety of articles of a miscellaneous nature. For some of these articles there may be a continued demand at certain posts and stations, while for others the demand is only occasional. Supplies of this nature are not as a rule carried in stock by depots or post quartermasters but are purchased, as needed, from funds made available to local authorities.

During the past two years the procurement of motor vehicles has been one of the most active problems confronting the Quartermaster Corps. During that period over 15,000 trucks and cars of all kinds have been

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has given us the opportunity to closely observe our procurement methods. As defects are noted or as improvements can be made action is taken at once to correct the situation. As a result of our experience there are certain definite lessons that can be learned and which can only be corrected as time goes on.

One of the principal ones of these lessons is the need for an efficient system for the control of money, stock, and purchases. To effect this change we have modified our policies so as to require that depots submit replenishment requisitions semi-annually, on October 1st and April 1st. To meet this change, the methods of handling funds have also been changed so that funds are retained in the Quartermaster General's office, and authorized for obligation only to meet approved requisitions. These replacement requisitions, together with stock reports, which are submitted annually on December 31st, as well as on the month following inventory, give our office complete information as to stocks on hand, and action can readily be taken to transfer excess stocks to depots where it can be utilized, and to maintain stock levels at any point where the status of funds, or other consideration may dictate. This control of stocks and money makes the control of purchases automatic.

Realizing the need for a dependable storage system, the Quartermaster Corps in 1931 adopted the system devised and used by the Bureau of Supplies and Accounts of the Navy. This system divides all supplies

into classes and provides for the grouping of classes into departments to facilitate administrative control. Each item of standard stock to be carried by depots and posts is listed in the Quartermaster Supplement to the Federal Standard Stock Catalog. Within each class the items are arranged in alphabetical sequence, and each item has a stock number arranged in numerical sequence. In the warehouses the supplies are arranged in the same alphabetical-numerical sequence so that if the system is followed it is impossible for an item to be misplaced. In the offices the stock record cards are arranged in the same alphabetical-numerical sequence so that the offices and warehouses are organized along parallel lines.

The greatest virtue of this system is its simplicity. When stock and stock records are arranged in this order it is as easy to locate any item in stock as to locate a house by street number, or a firm in the classified section of a telephone directory.

This system provides an arrangement of supplies so simple that any man or woman of ordinary intelligence can quickly locate any item in stock. Prior to the installation of this system depots were slow in filling requisitions from stock due to the lost motion in locating articles for shipment. Soon after the system was installed it had a severe test when the Army was called upon to equip and supply the Civilian Conservation Corps. Orders were issued by the Quartermaster General that all depots must ship supplies called for within twenty-four

hours from receipt of requisitions, and, except in rare instances this was done by all depots. Any system that will accomplish this long desired result is good.

That the system is still giving these excellent results is well illustrated by a recent shipment made from the Philadelphia depot. On November 3, 1935, the Eighth Corps Area Depot unexpectedly received a requisition for clothing for a high school R O T C. unit in San Antonio, Texas. This clothing was required to equip that unit for an Armistice Day parade. The Eighth Corps Area radioed the Philadelphia depot requesting that immediate shipment be made direct to the high school unit. In spite of the fact that the radio was received on Saturday, when the Philadelphia depot is closed, the shipment was made the next day, and reached the unit for which it was intended on November 8th, allowing them three days to get fitted for the Armistice parade on the 11th. The Quartermaster Supply Officer of the Eighth Corps Area Depot, who had but recently returned from foreign service, was so surprised by this quick action that he wrote a special letter of commendation to the Commanding Officer of the Philadelphia depot. Of course this requisition was handled as a special case, but the action taken was no different from that taken every day by all depots.

The action now being taken to effect control of money, stocks, and purchasing is merely the application of control methods to the

uniform storage system adopted by the Quartermaster Corps in 1931.

The employment of inspectors is one of the most difficult things connected with procurement. There does not seem to be any immediate solution to this problem although the Civil Service Commission are cooperating by prescribing a higher standard of examination in the hope that better qualified employees may be obtained. This will be one of the biggest problems to be encountered on mobilization and it is one that will be studied with a view to obtaining a solution.

Our experience has clearly demonstrated the need for carrying a reserve stock of blankets and textiles for the manufacture of clothing, as well as those articles that cannot be immediately procured from dealers. Unless we have this reserve stock there will be a delay of several months which may seriously interfere with mobilization. The provision of a reserve stock is dependent upon the availability of funds. This fact will not be lost sight of in submitting our annual estimate, and I sincerely hope that we may be fortunate enough to secure funds for this purpose.

Our experience with the Civilian Conservation Corps has given us an excellent opportunity to compare the virtues of centralized purchase with those of decentralized or regional purchase. The success or failure of the supply system of the Quartermaster Corps in the next war will depend upon the success or failure of our procurement plans since all articles of Quartermaster supplies will be required on M-day. Many

of them being of a perishable nature or subject to deterioration cannot be carried in stock for mobilization purposes, and it is not probable that funds will ever be sufficient to provide a war reserve of all essential items. For this reason, we have concentrated on a plan to bridge the M-day gap in procurement when it becomes necessary to switch from the peace-time system of highly centralized procurement to the war-time system of regional procurement. Under this scheme, each procurement district and depot will know in advance just what articles it must procure on and after M-day, and where it can get them. It is contemplated that articles of purely commercial nature required for mobilization that offer no procurement problem will be decentralized to corps areas for procurement, the procurement district offices confining their purchases to mass procurement of controlled articles and supplies for the theatre of operations. Many of the details of this M-day bridge plan remain to be worked out and the plan itself will not be presented until the details have been worked out.

TIME LAG RECORDED IN "CCC" PURCHASES
MADE BY THE PHILADELPHIA QUARTERMASTER DEPOT

ITEM	NO. OF BIDS	NO. OF AWARDS	CONTRACT DATE	DATE OF FIRST DEL.	TIME LAG	TOTAL QUANTITY	MONTHLY PERCENTAGE OF DELIVERIES											
					OF FIRST DEL. DAYS		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	
BLANKETS	14	5	3-27-35	4-26-35	30	273,437	1	15	27	24	24	9						
CLOTH, CTN. KHAKI	12	5	11-5-34	1-4-35	60	4,930,000	4	3	10	--	25	8	11	10	9	11	9	
CLOTH, SERGE	8	2	11-2-34	12-28-34	56	502,789	5	3	7	20	17	18	12.5	9	7	6		
DENIM	9	1	3-27-35	4-3-35	7	5,798,572	19	25	20	26	10							
DRAWERS, C/W	12	7	3-30-35	4-30-35	31	1,171,875	3	24	35	30	8							
OVERCOATING	12	8	3-27-35	4-26-35	30	1,308,750	1	9	11	27	15	14	17	6				
SHIRTING, FLANNEL, O.D.	7	3	2-18-35	4-15-35	56	744,352	2	11	49	38								
SHIRTS, FLANNEL	13	1	3-27-35	5-25-35	59	400,000	3	36	36	25								
SOCKS, WOOL, L. WT.	14	1	3-27-35	4-26-35	30	1,562,500	2	59	39									
UNDERSHIRTS, C/W	12	9	3-30-35	4-22-35	24	1,171,875	3	27	16	50	4							