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THE NAVY SUPPLY SYSTEM

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THE NAVY SUPPLY SYSTEM

It is my purpose this morning to assist you in your studies on the current problem, and later problems in the course, by supplementing Admiral Johnson's lecture of yesterday with a description of the Navy's supply system.

You have probably concluded from my subject that I will try to explain a wider scope of Navy organization and routine than is the subject of your study in the current problem. In such a conclusion you are correct. Some explanation of the reasons for this may be helpful.

One reason for the selection of the wider scope is derived from the close relationship that should prevail between the phases of material supply we here include under the word procurement and the other phases that complete the cycle of supply. We usually hear Navy purchase procedure characterized as centralized and if we are careful in the understanding conveyed by that term, realizing that it does not mean rigid assignment of all purchasing to a single office located in Washington the characterization is correct. Rather than that the purchase centralization the Navy achieves in practice is that of assignment of that function, with some exception, to a specialist corps of staff officers.

The danger that lies ahead of a mere explanation of Navy purchase procedure or even those steps of material supply included in the War Department under the heading of procurement seems to me to be that with only that understanding you will not comprehend why the system used is advantageous to the Navy. Centralization of purchase when considered on its merits alone has many disadvantages as well as advantages. But when viewed as an integral part of a complete supply system designed as a whole to fit the peculiarities of the Navy's operating conditions its suitability as a part and only a part of the whole becomes another matter. Hence I will impose on your good will and take up much of your valuable time this morning in going farther afield than might at first thought seem necessary.

The Navy has no use for the word "procurement" which is comparable to the specialized meaning given that word by the War Department. When in the rest of this discussion I use the word, without special qualification, I will mean "coming into possession of by some effort or means." When I use the word "purchase" I mean the standardized procedure of government purchase that includes the steps of advertising, bidding, awarding and contracting.

You will readily appreciate the fact that there is included in the Navy's material requirements a very large assortment of items that in many cases vary considerably as to essential characteristics, and that the system or routine developed to handle this material is burdened with many details and special exceptions appropriate to special governing circumstances. There is hardly anything I might say in describing the Navy supply system that is not subject to some special exception. Our purpose will be served if I limit myself to an attempt to describe the general routine usually followed, making this admission of the fact of many special exceptions now, in order to avoid useless and tiresome detail later.

Nothing that I will say applies to the supply or procurement of material for the Marine Corps. Since, in many cases, it is necessary that Marine Corps organizations operate as independent, self-contained and self-sufficient units, it has been considered desirable that they administer the work of material supply independently.

As we are interested in material supply the special routine applicable to contracting for public works involving both labor and material in their construction, for lands, buildings and vessels, and for the building of ships, and to the chartering of vessels and leasing of land will not be treated.

You are of course familiar with the organization of the Navy, the assignment of functions to its principal agencies and with the relationships between the various divisions of the Naval Establishment in the performance of assigned duties. On this as a basis I have organized what I have to present, in the following sequence

- First A discussion of basic factors governing the supply routine.
- Second A description of the manner in which responsibility in the supply routine is assigned .
- Third A description of the operation of supply. .
- Fourth Resumé.

Basic Factors

Turning now to my general outline, I will take up first that division I have chosen to call basic factors governing the supply routine.

Operating Conditions Operating conditions constitute the first and most significant of these factors.

The important users of material in the Navy are the vessels of the fleet or fleets and the fleet-overhaul and repair facilities. I list these as the important users not only because of the quantity and variety of material consumed, but also because of the axiomatic fact (unfortunately not always recognized) that the fleet constitutes the sole reason for the existence of any part of the Naval Establishment. The probabilities of employment of units of the fleet require that they be capable of operating in any part of the ocean frequently quite remote from sources of material supply and often for extended periods of time. Now, any modern war vessel, whatever its special classification, is a very complex machine as any of you who have inspected one of them can readily testify. There arises from this complexity a very wide variety of material requirements as to item. Yet it is not practicable without too great sacrifice of other essentials to provide within the hull of any vessel much room for the storage of materials. Efficient storage use of the limited space available on board ships is mandatory.

The Navy has considered then that these operating factors, namely

- (a) The wide variety of materials requisite to efficient operation and the importance of their ready availability, and
- (b) The practical limitation of storage space and the importance of capability of self maintenance over long periods

make desirable the assignment of responsibility for ship supply to a specialized corps of officers. The function of supply on board ship, that is stock upkeep, storage and issue is centralized in a department known as the ship's supply department officered, except on small vessels by staff officer specialists.

When vessels put into port, quick replenishment of the needed materials, often as much as a four- to six-months' supply, is necessary in order that they may be quickly on their way again. This

requirement can only be met by having available at strategically located points supply bases or depots that maintain at all times a complete stock of the materials that may be required.

The shore part of Navy supply, then, is organized to consist of a number of strategically located supply bases or depots where complete, or nearly complete, reservoirs of all material requirements are constantly maintained. Economy being an important factor in peace time, and probable fleet movement being predictable in peace time for a number of months in advance, this ideal of shore-based distribution of a reservoir of supplies is only approximated. Nevertheless it is the governing factor of the supply organization and we have, as principal supply points of the Navy, the Navy Yard Supply Departments at Boston, New York, Philadelphia, Seattle, San Francisco, Honolulu, and Cavite, the Navy Supply Depots at Hampton Roads and San Diego, and for aircraft material the Naval Aircraft Factory at Philadelphia and the Naval Air Stations at Hampton Roads and San Diego.

The other users of material, namely, industrial shore establishments for other than ship-overhaul and repair, and miscellaneous shore activities such as training stations, radio stations, experiment stations, etc., all being of lesser Navy operating importance than the fleet and its repair or overhaul facilities, their requirements are given but little weight in the design of the supply system. They must so conduct their work as to conform to the mechanism established to serve the fleet in the matter of supply, overhaul, and repair.

At each Navy activity except the small ships and shore units, the custody and issue of all material in store awaiting issue for use is in general the function of the Bureau of Supplies and Accounts and its field representatives. The officer personnel charged with this work comprises the Supply Corps, a group of staff specialists who perform duties under cognizance of the Bureau of Supplies and Accounts for practically their entire period of service in the Navy.

Revolving Fund Another important basic factor governing the Navy methods of supply is the development and use in its supply system of a revolving-fund method of financing. I mean by this the use of what is called the Naval Supply Account Fund and its corollary the Naval Supply Account to finance the purchase or manufacture and the holding in stock of material awaiting issue for use.

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The Naval Supply Account Fund comprises funds in the Treasury of the United States which have been specifically set aside by act of Congress to finance the purchase of supplies and materials for general issue as a charge to any Navy appropriation. When material is issued for use, the proper appropriation is charged with the cost of the material and the Naval Supply Account Fund credited - the money then being available for the purchase of more material without any restrictions except that material purchased must be an item or items that the Navy is authorized to issue as a charge to a Naval appropriation. This fund, then, is virtually a revolving, working capital fund.

As a subsidiary to this fund there is the Naval Supply Account, a property account on the books of the Navy in which property accountability is maintained for all materials for which payment has been made from the Naval Supply Account Fund. Note carefully the difference between the Naval Supply Account Fund - money on the books of the Treasury - and the Naval Supply Account the property account wherein is carried all material financed by the fund until issued for use.

Under the procedure of centralized storage the Naval Supply Account Fund actually is the inventory of all common materials and supplies held by the Navy for general issue, whether in store afloat or in store ashore. On June 30, 1934 the stock on hand in this account totaled approximately \$45,800,000, and the cash balance in the Naval Supply Account Fund was approximately \$28,400,000 - the total of these two being \$74,200,000.

Transactions in this account during the fiscal year 1933-1934 are summarized as follows

	<u>Thousands of dollars</u>	
Value of fund July 1, 1933		83,218
Loss - Decreases in fund fiscal year 1934-		
By sale	644	
By survey and price adjustment	1,860	
By inventory	30	
Deficiencies charged to fund during year	5,13	
Transferred to Increase of the Navy	8,000	
Net charges GAO settlements	14	
	<u>10,561</u>	
Increases in fund during fiscal year 1934		
Transportation costs overabsorbed	62	
Gains, discounts, liquidated damages	167	
Miscellaneous	59	
Appropriations	<u>2</u>	<u>290</u>
Net decrease		10,271
Value of Fund 6/30/34		<u>72,947</u>
Accounts Payable		953
Contingent Liability		260
Total		<u>74,160</u>

The Bureau of Supplies and Accounts administers the Naval Supply Account Fund and the Naval Supply Account, and is particularly careful to see that the stores account is kept liquid, that is, not loaded up with dead or slow-moving stock. The use of this revolving-fund routine releases current annual appropriations from charges until material is actually used, finances a kind of war reserve, facilitates consolidated procurement of material, and enhances the mobility of the fleet through the maintenance of stocks for current needs and immediate issue at strategically located shore depots.

The history of this Fund and Account originates with the Act of March 3, 1893 which set aside \$200,000 as a fund for the express purpose of permitting procurement of ordinary supplies required for the several bureaus of the Navy, in such quantities as to permit economical purchase without regard to the limit of annual appropriations, and to provide a stock available for prompt issue to any bureau requiring it. Since then throughout many changes in size and use the central idea has remained the same.

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It should not be assumed, however, that all purchases of Navy material are cleared through the Naval Supply Account Fund. You will note that I stated that liquidity of the Naval Supply Account is important. Because of this and also because the fund is limited in size, special material of high value or in danger of quick obsolescence is usually purchased as a direct charge to an appropriation. Technical ordnance, aviation, and submarine materials are ordinarily purchased and paid for directly under the appropriation concerned.

The relative use of the Naval Supply Account Fund to finance purchases and that of purchase directly under an appropriation is indicated by the following table which summarizes for the fiscal year 1933-34 the transactions in the Naval Supply Account, through which all purchases of material financed by the Fund are cleared, and the Appropriation Purchases Account, through which all materials (specifically material that will be held in store awaiting issue - this does not include purchases of ships) purchased as a direct charge to the appropriation are cleared.

	N.S.		A.P.A.	
	Millions of dollars			
Stock on hand July 1, 1933	48.4		485.7	
Receipts July 1, 1933 to June 30, 1934-				
From purchase	49.5		18.8	
From manufacture	13.6		13.7	
Miscellaneous sources	1.7	64.8	51.7	84.2
		<u>113.2</u>		<u>569.9</u>
Expended July 1, 1933 to June 30, 1934-				
For use and to manufacture	27.0		18.2	
For ships	34.8		48.4	
To A.P.A.	2.7		---	
Miscellaneous	3.6	68.1	13.0	79.6
Balance on hand June 30, 1934		<u>45.1</u>		<u>490.3</u>
		<u>113.2</u>		<u>569.9</u>

It will be noted that although the inventory of stock on hand in the Appropriation Purchases Account is many times larger than the inventory of material in the Naval Supply Account, the activity in the latter account is approximately the same - hence the rate of turnover in the Naval Supply Account is much faster than in the Appropriation Purchases Account. This is accounted for by the fact that the Appropriation Purchases Account inventory includes many items of high value, such as ordnance material, in store and includes also the value of reserve supplies of ordnance material including ammunition.

For those of you who have a further interest in the study of the Naval Supply Account Fund method of financing purchase and manufacture of materials for stock I recommend a study of pages 20 to 24, inclusive, of the Report of the Paymaster General of the Navy for the fiscal year 1919 and of the provisions of the Act of March 1, 1921.

The following data analyzing in part the value of material in store in A.P.A. by classes may be of interest in passing

<u>Stores</u> <u>Class</u>	<u>Millions of dollars</u>
1. Guns	119.3
2. Small arms	5.3
3. Mines, torpedoes, bombs, etc.	75.3
4. Ammunition	162.2
16. Radio & Sound Apparatus	2.4
20. Submarine materials	3.4
49. Aircraft, aeronautic apparatus and parts	32.0

Value of material in store afloat

NSA	7.4 millions
APA	6.1 "
CSS	1.3 "
ammunition	29.4 "

Value of equipment in use - 6/30/34

Ordnance	\$130,743,000
Aeronautical	33,400,000

The NSA is not the only fund of this type used by the Navy. Purchase and storage of items of clothing is financed by a similar fund called the Clothing and Small Stores Fund. On June 30, 1934 the Navy held in storage under this fund items of clothing and clothing material valued at \$7,600,000, the cash balance was \$7,980,000, and the issues made during the year amounted to \$2,041,000. The stock of material on hand then would at the outbreak of an emergency provide a six months' supply for a Navy personnel of approximately 135,000 plus original outfits for 60,000 recruits. In addition orders could be placed immediately for an equal amount without waiting for an appropriation.

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Consolidation of requirements The third and last basic factor influencing the supply system is that of consolidation of requirements for purchase. You will appreciate that the various bureaus have need of identical items of material in the performance of functions assigned. Centralization of storage of material, together with the use of the fund method of financing material in store consolidates the reservoir of materials maintained to meet these needs. The advantage of buying on a large quantity basis makes desirable the consolidation for purchase as one quantity the entire Navy's needs for all items insofar as this is practicable. This the Navy accomplishes by means of its stock replenishment routine. The methods used will be explained in some detail during my description of the operation of supply.

The use of the revolving fund method of financing the purchase and storage of material is as important to the advantageous consolidation of requirements for purchase as is the centralization of storage and purchase. The revolving fund, centralized purchase, consolidated purchase, and centralized storage all are interdependent, the full value of each not being obtainable in the absence of the others as a part of a supply system.

This concludes my discussion of what I have chosen to designate as basic factors influencing Navy Supply routine.

Assignment of Responsibility

Let me direct your attention now to the next topic in my general outline, that is, the assignment of responsibility for various steps in material supply. To assist you in this discussion I have prepared a synopsis of that assignment. This is appended as Chart "..."

Requirements-Specifications You will note that the first step is the quality of definition of requirements by specification. You have studied the assignment of functions to the eight bureaus of the Navy Department, and you have had it described in Admiral Johnson's lecture.

Let me recall to you, in connection with this step in the material supply chain, the following provisions of Article 393 (8), Navy Regulations

"Each bureau shall determine upon and require for or have manufactured all material, apparatus, tools, stores, fuel, transportation, office supplies, and appliances of every kind needed in carrying out its duties, as hereinafter defined."

In other words, each bureau determines upon the characteristics of the material that will be required in the carrying out of its duties as they are defined by articles of the Navy Regulations subsequent to the one quoted above.

This matter of responsibility for specification of materials required is also influenced by the wording of appropriations which Congress makes each year to defray the cost of performance of the particular duties and functions for which the bureaus are responsible. For example, the following quotation from the appropriation made for the Bureau of Engineering for the fiscal year ended June 30, 1935 establishes or defines kinds of material which may be charged against the appropriation for that bureau.

For repairs, preservation and renewal of machinery, auxiliary machinery, and boilers of naval vessels, yard craft, and ship's boats, distilling and refrigerating apparatus, repairs, preservation, and renewals of electric interior and exterior signal communications and all electrical appliances of whatsoever nature on board naval vessels, except range finders, battle order and range transmitters and indicators, and motors and their controlling apparatus used to operate machinery belonging to other bureaus, searchlights and fire-control equipments for anti-aircraft defense at shore stations, maintenance and operation of coast signal service; equipage, supplies, and materials under the cognizance of the bureau required for the maintenance and operation of naval vessels, yard craft, and ships' boats, purchase, installation, repair, and preservation of machinery, tools, and appliances in navy yards and stations, accident prevention, pay of classified field force under the bureau, incidental expenses for naval vessels, navy yards, and stations, inspector's offices, the engineering experiment station, such as photographing, technical books and periodicals, stationery and instruments, services, instruments, machines and auxiliaries, apparatus, and supplies, and technical books and periodicals necessary to carry on experimental and research work, maintenance and equipment of buildings and grounds at the engineering experiment station, Annapolis, Maryland, payment of part time or intermittent employment in the District of Columbia or elsewhere of such scientists and technicians as may be contracted for by the Secretary of the Navy, in his discretion, at a rate of pay not exceeding \$20 per diem for any person so employed, in all, \$15,542,000 . . .

From these appropriation wordings, and the bureau responsibility defined by Navy Regulations, there is developed what is known as a Classification Index of Naval Stores and Material. This index, a publication of the Bureau of Supplies and Accounts, attempts to list all items of material that are used by ships and aircraft of the Navy, and indicates for each item the bureau appropriation that may be charged with the cost. Since the regulation previously quoted prescribes that each bureau "shall determine upon" material used in its assigned functioning, and appropriations are granted to defray the cost of such material, this publication, indicating as it does what items of material may be charged to bureau appropriations, also establishes that which is commonly called technical responsibility. This includes responsibility for the proper specification of the material and for the conduct of all the matters of research, development, experimentation, and knowledge of industrial development essential to the specification of an item best suited to Naval needs.

For example, we find in this index, "Incomometers, masthead," listed as an item under the Bureau of Navigation column. This indicates the Bureau of Navigation responsibility for specifications for this item. We also find in the index many items that may be issued and charged to two or more bureau appropriations, for example, "Alcohol, denatured," may be issued and charged to the appropriation of all bureaus except the Bureau of Supplies and Accounts. Technical sponsorship for such items is established by the Navy Department Specifications Board wherein, by mutual consent of bureau representatives, such sponsorship is assigned. In the case cited sponsorship for Alcohol, denatured, has been assigned to the Bureau of Ordnance. After such assignment it becomes the duty of the sponsoring bureau to conduct all the necessary work in the development of the specification, and obtaining its approval by other bureaus concerned. The composition and duties of the Navy Department Specifications Board are shown in the monograph "Laws and Regulations Pertaining to the Navy" which you have as a reference.

For items not included in the Classification Index, technical responsibility is determined in the same way as for items listed, that is, on the basis of bureau assignment of responsibility and appropriation authorization.

It may be well to note at this point that the division of duties among the bureaus of the Navy Department is not primarily along commodity lines. Rather it is in accordance with the general divisions of a ship. Ships must have hulls and all that pertains to building, equipping, and maintaining the hulls is the function of the Bureau of Construction and Repair. They must have propulsion - this is the duty of the Bureau of Engineering, they must have armament - the Bureau of Ordnance, they must have aircraft - the

Bureau of Aeronautics, they must be navigated - the Bureau of Navigation, they must have personnel - the Bureau of Navigation, the personnel must be clothed and fed - the Bureau of Supplies and Accounts, the health of the personnel must be looked after - the Bureau of Medicine and Surgery, the Navy must have public works and public utilities on shore - the Bureau of Yards and Docks. It is purely incidental when this division of duty conforms to some usual commodity classification or technical specialization.

In summary, may I say, then, that the technical responsibility for material is definitely assigned to various bureaus on the basis of its requirements for material in the performance of the functions for which they are made responsible by Navy Regulations and for which appropriations have been made by Congress. This technical responsibility includes all the work of specification, the final form of which, however, must be satisfactory to the purchasing agency - the Bureau of Supplies and Accounts and its field representatives - since specifications must not be so drawn as to prevent compliance with purchase laws and regulations.

Requirements-Quantity. We will now turn to the next sub-head under Requirements (Chart A) "Quantity determination." There is not much that need be said regarding this step. Briefly, the using activity and/or the responsible bureau makes this determination, the one important variation to this general rule being with respect to items carried in the Naval Supply Account. The decision in these cases is a function of the Bureau of Supplies and Accounts and its field agencies, the quantities acquired of any item being governed by many factors, among which are prospective rate of use, keeping quality of the item, time required for procurement and delivery, and market conditions. Note again that this revolving-fund method is used in order that purchase of ordinary supplies required may be made in such quantities as to permit economical purchase without regard to the limit of annual appropriations, and to provide a reservoir of needed stock for immediate issue when required.

Requirements-Time and Place As to the next step, the determination of the time and place of requirements, this is also a prerogative of the using activity.

Acquisition-Manufacture The next major division of the material supply chain is acquisition, and for this step three general methods have been listed. The first of these is acquisition by manufacture. Referring back to the quotation of Art. 393 (8) Navy Regulations, it will be remembered that the duty assignment to bureaus, specified by that regulation, includes in each case

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responsibility for such production of the materials used in their special field of cognizance as is attempted by the Navy, hence we have a Naval Gun Factory and a Powder Factory operated by the Bureau of Ordnance, the Naval Aircraft Factory operated by the Bureau of Aeronautics, the Naval Clothing Factory operated by the Bureau of Supplies and Accounts, etc. No further discussion of this step is believed necessary.

Acquisition-Purchase The next step then becomes, by reference to the Chart, "Acquisition by purchase." For the purposes of this discussion the word purchase means the procedure of advertising for bids, evaluating bids, making award to the successful bidder, and preparing and signing the contract for material. It does not include the work of preparing specifications or of inspection of the material received.

Since your references in the current problem explain the assignment of duties in this field of activity in some detail, this discussion will touch on it but slightly for the purpose of emphasizing important points

First All authority to purchase and contract for services and supplies of the Navy is vested in the Secretary of the Navy by Sections 417 and 3714 Revised Statutes.

Second Acting under the authority granted by Section 419 R.S. to distribute the business of the department in such manner as he shall deem to be expedient and proper, the Secretary has distributed that purchase authority as follows:

- (a) He has reserved for himself the authority to sign contracts in large projects. In this reserved group, the Bureau of Yards and Docks arranges for his signature the purchases for public works, the Bureau of Ordnance arranges for certain articles of arms, ammunition, and gun forgings, the Judge Advocate General arranges purchases of lands, buildings, vessels, and certain equipment involving the labor of installation, and arranges matters pertaining to the chartering of vessels for other than cargo purposes.

(b) He (the Secretary) has delegated to the Paymaster General, as Chief of the Bureau of Supplies and Accounts, the purchase function including authority to sign contracts for all other supplies and material.

Third The authority of the Paymaster General has again been delegated under certain administrative restrictions to field activities. When officers of the Supply Corps are on duty in, or readily accessible to, field activities, these purchase functions are exercised by them. The actual practice in this purchase procedure will be described in more detail in my discussion of the operation of supply.

Acquisition-Transfer Where acquisition of material is to be by transfer, the next step shown on Chart 1, orders covering such transfer are placed with other government departments and administered in a manner similar to the procedure for acquisition by purchase. With reference to transfer of materials between bureaus of the Navy Department, it is important to note that all material held in store by the Navy is available for general use whether in Naval Supply Account or Appropriation Purchases Account except in case of certain materials which have been paid for by appropriations of the Bureaus of Ordnance and Aeronautics.

Inspection Passing now to the next division of material supply, we find that Navy inspection may be conducted at either

- (1) The point at which material is first received by a naval activity, or
- (2) The point of fabrication.

If inspection is to be at point of first receipt by a naval activity, the supply department of that activity, on receipt of the material, notifies the department of the local activity which has the technical facilities and knowledge necessary for the quality inspection of the material and requests that the necessary inspection be made. Samples may be sent to the Engineering Experiment Station or other point where testing facilities are available.

Inspections at the point of manufacture, when this type of inspection is considered desirable, are conducted by a field inspection service which has been organized for this purpose. At each

ship yard where naval vessels are building, Superintending Constructors, Inspectors of Machinery, and Inspectors of Ordnance are stationed to perform the inspection function. Inspectors of Naval Aircraft are stationed in each locality where important contracts for the construction of aircraft are let.

In addition to these inspectors assigned by responsible bureaus to perform duty for them on certain large contracts, the Navy maintains an inspection organization known as the Field Inspection Service. For this service the United States is divided into twelve inspection districts. The headquarters of each district is usually located in the larger cities or industrial centers of the district. Specifically they are at Atlanta, Bethlehem, Boston, Chicago, Cincinnati, Hartford, New York, Philadelphia, Pittsburgh, San Francisco, Schenectady, and Seattle.

General administrative supervision of and responsibility for these inspection districts has been assigned by mutual agreement to one of the bureaus of the Navy Department. For example, the Bureau of Construction and Repair has general supervision of the districts with headquarters at Atlanta, Boston, Philadelphia, Pittsburgh, and Seattle.

Each inspection district is administered by a naval officer designated as Inspector of Naval Material. To assist him he has three principal classes of personnel. These are

- (1) Commissioned officers whose training and experience qualify them for this duty,
- (2) Civilian inspectors, and
- (3) Laboratory personnel for making chemical, physical, and metallurgical tests.

Each district is manned with officer and civilian personnel trained to inspect the types of material procured in that district, and is equipped as necessary for the testing of these materials.

Offices of Resident Inspectors with similar officer personnel and equipment are often stationed at other points where the volume of work justifies. These offices of Resident Inspectors are under the general control of the Inspector of Naval Material for the district in which located. Each officer performing inspection,

A purchasing officer placing an order or awarding a contract on which field inspection service is required, forwards a copy of each order or contract to the proper inspection office. This is all the inspector needs to start his performance of the inspection.

In general, the bureau having technical responsibility supervises the inspection, although the field inspection service is not organized on bureau lines. The cost of maintenance of the field service offices is shared jointly by the bureaus in proportion to the volume of business in each district which is incident to the material of their cognizance. Officers assigned to this inspection duty almost always are officers of the line or staff corps who have specialized by taking one of the several technical postgraduate courses of training which the Navy provides. Each officer performing inspection, does so as the representative of the bureau having technical cognizance of the material and is answerable to that bureau for proper performances of that function, regardless of corps specialization or other affiliation.

Although the primary function of the naval inspection service is the inspection of naval material, nevertheless a great deal of material for other branches of the Federal Government is inspected as well. Between 30 and 40 per cent by value of material being inspected is for other than naval activities. The cost of Field Service inspection during 1934 averaged less than 1 per cent of the total cost of the material inspected.

Payment Payment, the next step in the material supply chain, is relatively unimportant. In your study it is of interest to note, however, that because of the use of the revolving-fund method, much of the payment, insofar as bureau appropriations are concerned, is merely an accounting transaction on the books of the Navy Department. Payments under contract involving the disbursement of public funds are always made by an officer of the Supply Corps except in a few cases where it has been necessary to designate special disbursing agents such as at offices of Naval attachés and on small ships operating in remote places.

Storage and Distribution. The final step in the material supply chain, storage and distribution, is of interest in this discussion only insofar as the management of this step affects other steps in the routine. Storage and distribution of material, except for medical stores and ammunition, has been assigned as a function of the Bureau of Supplies and Accounts. The way in which Navy operating conditions have contributed to this centralization of storage in the Navy has been described. This means that at Navy yards and stations an officer of the Supply Corps of the Navy is, under the

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direction of the Commandant, detailed for duty as supply officer in charge of the Supply Department. The supply officer has charge of the receipt, custody, shipment, transfer, and issue from stores of all supplies, material, manufactured articles, and all other articles subject to invoice. Similarly on board ship a supply officer, the senior officer of the Supply Corps attached thereto, has charge of the procurement of stores and material for the ship, the maintenance at all times of sufficient stores of material and supplies, and the accounting and custody of all material not issued for use except fuel, ammunition, and Marine Corps and medical stores. On ships not carrying officers of the Supply Corps, such as destroyers, submarines, and other small craft, supply functions are performed by the commanding officer and the heads of the various ships' departments. These officers while so acting, however, are agents of the Paymaster General of the Navy subject to the instructions promulgated by him for the performance of this duty.

This centralization of storage is an essential element in the Navy system since the full benefit of consolidated purchase of requirements could not be as readily realized without it. It has other advantages not of special interest in this study

Operation of Supply

In an attempt to clarify further the Navy management of supply, the operation of the supply routine will be detailed in this part of the discussion. Chart B, appended, has been developed to aid in following the descriptive discussion.

Starting with the ship, which is in fact the point of origin for all needs for material, it will first be noted by reference to the Chart that the ship's organization comprises seven departments namely, Navigation, Ordnance, Engineering, Aviation, Construction, Supply, and Medical. The duties of these departments with respect to operation, upkeep and maintenance on board ship correspond to the assignment of jurisdiction to the various bureaus of the Navy Department concerned with shipboard work. In the order ship's departments are named above, these bureaus are the Bureaus of Navigation, Ordnance, Engineering, Aeronautics, Construction and Repair, Supplies and Accounts, and Medicine and Surgery.

Bureau control of the use of material on board ship by the various ships' departments named is exercised through the medium of allowance lists and appropriation allotments. Allowance lists for each ship are prepared by each bureau and govern the use of material by specifying the items that may be issued aboard ship as a charge against bureau appropriations, and in the case of equipment items the quantities that may be placed in use. Appropriation

allotments are granted each ships' department by the appropriate bureau to cover the estimated normal operating costs of that department for a given period of time. These allotments are published in General Orders, are cumulative, and may be increased when warranted by application and explanation to Fleet or Force Commanders.

It is the duty of the ships' supply officers to see that the material requirements of the ships' departments are met by assuring the presence on board of an adequate supply of the consumable material allowed for use, subject to the limitation of storage space, and by procuring for the ships' departments the equipment which the proper bureau has allowed for use on board. In other words, the ship's supply department, under the direction of the supply officer, is the ship's department store where each department has a credit against which may be charged the cost of its material requirements. As in the case of a department store the ship's supply officer, corresponding to the manager, must insure adequate stock to meet the needs of his customers, the ship's departments, and in the interest of economy must watch carefully his stock turnover. He cannot hold reduced price sales to dispose of slow-moving items.

In obtaining this material the supply officer has what might be called "secondary" sources of supply and "principal" sources of supply. The secondary sources of supply are: (1) Open purchase in the case of materials of small value and in cases of emergency, (2) the supply facilities of the fleet train, and (3) excess stock on other ships. The principal sources of supply are: Supply departments on shore that have been assigned duty as central supply sources to maintain stocks of material for issue to ships and other shore stations. It is with these sources that the ship's supply officer places practically all of his requirements for material for the ship. These requirements are usually the ones originating from the ship's use of material as authorized by the ship's allowances, in which cases no approval of a bureau of the Navy Department or other agency is required before a shore supply source takes action to fill the requirements. Control of the quantity used is insured by the allotment system. Control of the quantity stored is insured by the physical limitations of storage space and administrative regulation.

Requirements do originate on board ships for items not covered by ships' allowance lists, in which cases the requisitions prepared by the supply officer bear notation of this fact, and they are referred to the shore supply source where information as to whether or not the item is in store is added. The requisition is then forwarded to the proper bureau of the Navy Department for approval or disapproval of its issue to the ship.

It is worthy of note at this point that consolidation of Navy material requirements starts at the point of origin of need for the material, since the ship's supply officer combines in his storage and in his requests for material the needs of all ship departments. Many items of Navy material are issued for use on board ship in the activities of two or more ships' departments.

Turning then to the shore-supply activity and its place in the Navy supply system we find that the supply departments of the large Navy Yards in the continental United States, and the Navy Supply Depots at Hampton Roads and San Diego, and the supply departments of the Navy Yards at Pearl Harbor and Cavite have been assigned duty as central supply sources to maintain stocks of material for issue to ships and other shore stations. Each of these central shore-supply sources has a number of smaller stations dependant upon it for their material supply.

Material needs incident to the operation of the smaller shore stations are cared for by a routine similar to that applicable to ships. Shore stations are not governed in their use of material by allowance lists as are ships, and the volume of material maintained in store at the smaller stations will, in general, not be as large in terms of months of supply as on board ship. The replenishment of stock is relatively simpler and faster than for a ship operating at sea and subject to unexpected movement of orders.

At Navy Yards and supply departments designated as central issuing points, the needs of the operating activities, the shore station departments, are referred to the supply department for fulfillment. The stocks maintained at these points act as the source of supply or, in the case of material not carried in stock, the material for the special need is procured by the supply officer.

The stocks of material to be maintained at these points are designated by either (a) the Bureau of Supplies and Accounts in the case of Naval Supply Account stocks, or (b) the bureau concerned for special material to be carried in the Appropriation Purchases Account.

The fundamental principle of stock upkeep is that there shall always be on hand as much of every item as will probably be required before that item can be replenished. At present the replenishment of standard items of general use is made every six months, and the average time required for replenishment is three months. The general rule for the principal supply points is the maintenance of a minimum stock equal to 12 months requirements as shown by past issues. Consideration is given to factors of deterioration and obsolescence in determining the quantity of stock

to be maintained. Material of a special or non-regular character required for construction, repair, or manufacturing work is not ordered in excess of the requirements of the project.

There are five methods of procurement open to the supply officer of a central supply activity. These are briefly:

- (1) Procurement through open purchase at the activity by the supply officer. This method covers such items as are procured ordinarily in local markets and not by bureau purchase, standard materials purchased on local requisitions approved by the commandant and articles required in cases of emergency.
- (2) Procurement by request on other shore activity.
- (3) Procurement through yard manufacture. Local yard manufacture is authorized in certain special cases when material is required for stock or to fill requisitions.
- (4) Procurement under running or term contracts.
- (5) Procurement through purchase by the Bureau of Supplies and Accounts on the basis of stock replenishment requests for items regularly carried or on basis of requisitions covering special requirements.

Replenishment dates for each of the various items of stores carried in the Naval Supply Account have been designated, and at the stated date information is obtained from all central issuing stations as to the excess stock available or the replenishment quantity required, information as to either excess available or quantity required being supplied by the records of past issues. This information is obtained for all items carried in the classes of material to be replenished at that time. The replenishment work has been evenly distributed over the year, due regard having been given to reasonable factors of price in the assignment of items to particular dates. Where the yard supply officer has submitted a request for replenishment no further action is required on his part as the Bureau of Supplies and Accounts handles the details from then on. Materials needed between replenishment dates, as well as for special needs, if not procurable under one of the other means of procurement, are made the subject of a requisition forwarded to the Bureau of Supplies and Accounts direct or via the bureau having technical cognizance.

The bureaus of the Navy Department may, in the performance of their duties, originate requisitions covering material for special projects under their cognizance, or they may direct its manufacture. Representatives in the field activities may also originate requirements for special items. In the first instance, if the material is not to be manufactured, the bureau will prepare a requisition giving all the pertinent information as to the requirements and forward this requisition to the Bureau of Supplies and Accounts for procurement action. The requisition may or may not furnish, for the information of the Bureau of Supplies and Accounts, a list of probable sources of supply. In cases of the special needs of the field activities, requisitions received by the bureaus are examined thoroughly by the technical bureau and, if approved, forwarded to the Bureau of Supplies and Accounts for procurement. Requisitions originating in this way, if finally resulting in purchase, cover the majority of cases in which the cost of the material is charged to a specific appropriation at the time of purchase.

Within the Bureau of Supplies and Accounts there are five divisions of the Supply Group specifically concerned with procurement. These divisions and their duties are

- (1) The Stock Division which has supervision of storage space ashore, the maintenance and upkeep of stock, inventories of stock, and record and approval of requisitions for material and supplies.
- (2) The Provisions Division which has supervision of the maintenance and upkeep of provisions stocks.
- (3) The Clothing Division which has supervision of the maintenance and upkeep of clothing stocks.
- (4) The Fuel Division which has supervision of fuel stocks, fueling plants and acceptable lists of mines and fuel suppliers.
- (5) The Purchase Division which is charged with the purchase duties of the Bureau and the supervision of purchase by field agencies.

All requests for material referred to the Bureau of Supplies and Accounts, whether they are regular replenishment requests or special requisitions, are referred first to either the Stock Division, the Provisions Division, the Clothing Division, or the Fuel Division for decision as to the method to be utilized. These divisions direct action by one of the following methods

- (1) Transfer of excess stock within the Navy,
- (2) Requests on other Government departments,
- (3) Manufacture by the Navy,
- (4) Purchase under General Supply Committee Contracts, or,
- (5) Purchase from civilian sources.

The first step taken in acting on any request for material is to determine the possibility of the utilization of excess stock. In making this determination the reports of excess stocks received simultaneously with requests for stock at the regular replenishment period are considered. Factors of transportation cost are considered in the movement of excess stock. Final decision as to the shipment of excess stock is made in collaboration with the Transportation Division of the Bureau of Supplies and Accounts.

Certain materials may be obtained from other Government departments. In some cases this action is mandatory, as in the case of items produced at Federal Prisons which must be obtained through the Department of Justice. Other departments may have an excess stock of material on hand which they have reported as available for transfer. In either case the division of the Bureau of Supplies and Accounts cognizant of the stock upkeep of the particular item will take the necessary measures to obtain the Navy's needs of these items. Past efforts to obtain materials in this manner have been hampered by the lack of a standard nomenclature and standardization of common materials in the various departments. This will be overcome when use of the Federal Standard Stock Catalogue becomes general.

In most cases of the manufacture of items of standard stock by the Navy, this has been handled as a direct transaction between the requiring activity and the distributing point. In some few cases the Bureau of Supplies and Accounts may arrange for manufacture through the Shore Establishment Division. The manufacture of special technical material is arranged by the cognizant technical bureau, the property being taken up on completion in the Appropriation Purchases Account.

Certain items, such as typewriters, are obtained through the medium of the contracts made by the Procurement Division of the Treasury Department. Use of these contracts by the Navy is restricted to a limited field as they are not readily adaptable to the Navy's routine and needs.

Where all other methods are not applicable, the requests for material are forwarded to the Purchase Division for appropriate purchase action.

When requests for material reach the Purchase Division the first action taken is to determine whether the purchase is to be made by the Bureau of Supplies and Accounts or by one of its agencies outside of Washington. The governing factors in this decision are

- (1) Whether the benefits of consolidation apply to the particular item,
- (2) Whether the technical bureaus are vitally concerned and their advice essential,
- (3) Nearness to primary source as a factor in meeting all the conditions, particularly where close contact between purchasing office and contractor might be a factor,
- (4) The importance of the item from the standpoint of cost if it is an item for local use;
- (5) The volume of work at hand.

The purchasing system is so constituted that the execution of the purchase function can be decentralized geographically at any time if considered desirable.

If it is decided that purchases will be made by the Bureau, the next step is the preparation of proposals or invitations to bid. These are called schedules. The requirements for standard stock items submitted at the prescribed replenishment date are consolidated in such manner as experience has indicated will yield the most satisfactory results. This is the final step in the routine of consolidation of requirements for purchase which I emphasized as being one of the basic factors governing the supply system. The elements of that routine are

- (1) Centralization of storage;
- (2) Specified dates of replenishment for each item observed by all shore supply activities,
- (3) Centralized purchase by the bureau.

Schedules are mailed to classified bidders who have signified their desire to bid on the items of material on a certain schedule. Each schedule covers only those items within a procurement group, that is, those handled by a particular industry or class of suppliers. The schedules furnish complete information as to the article desired, such as quantity, specification, and date and point of delivery.

In some cases bids are asked on partial quantities as well as the total to avoid the danger of over-consolidation. In some cases bids for delivery at other than the point of requirement, as well as that point, are requested in order that advantage may be taken of the possible economy of government freight rates or shipment in government vessels. Years of experience have yielded a fund of information that is used in every way possible to secure for the government the lowest cost for material that is consistent with its needs.

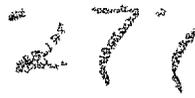
Schedules received from the bidders are placed in locked boxes as received. The boxes are opened publicly at the specified time and date, bids are read aloud and recorded, and every facility possible is offered the bidders to ascertain any information they desire. Awards are made by an officer as quickly as possible. In cases where technical or legal advice and recommendation is required all bids received are forwarded to the proper bureau or office for comment. As soon as the decision as to award is made, a notice of award is forwarded to the successful bidder, contracts or purchase orders are prepared and the proper signatures obtained. The activity requiring the material, the activity that is first to receive it, and the inspector concerned are notified and the purchase action of the Bureau is completed.

Centralization of purchase in one bureau and one staff corps, despite the exceptions that have been noted, has meant that approximately 99 per cent by number of all contracts let by the Navy are handled by the Bureau of Supplies and Accounts and officers of the Supply Corps. Of these contracts approximately 75 per cent by money value are made by the Bureau of Supplies and Accounts at the Navy Department, Washington, D. C.

Resumé

In recapitulation I would list the important characteristics of the supply system of the Navy as being briefly

1. Assignment of technical cognizance of material - specifications with the user.
2. Centralization of purchase, storage and distribution as a staff function.
3. Centralization or decentralization geographically of purchase execution as is considered desirable.
4. Centralization (in part at least) of inspection although supervision of inspection remains with the user.

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5. Use of the revolving fund to finance purchase and storage of a reservoir stock of materials for general use.
 6. Purchase of the consolidated requirements of materials where possible.

What has been functionalized and centralized for the Naval service are the closely related steps of purchase, storage and distribution - not purchase alone. The combination of these three is very desirable, although not absolutely essential, in order that full advantage may be gained from the revolving-fund method of financing purchases and storage and the consolidated purchase of requirements.

Proof of the general effectiveness of the Naval supply system lies in the fact that there has been no major change in that routine since 1892, except the installation of the General Stores-keeping System on Naval Ships in 1919. The establishment of the Office of the Chief of Naval Operations in 1915 was distinctly not a change in supply organization.

As to centralization of purchase in the Bureau of Supplies and Accounts in Washington the advantages are

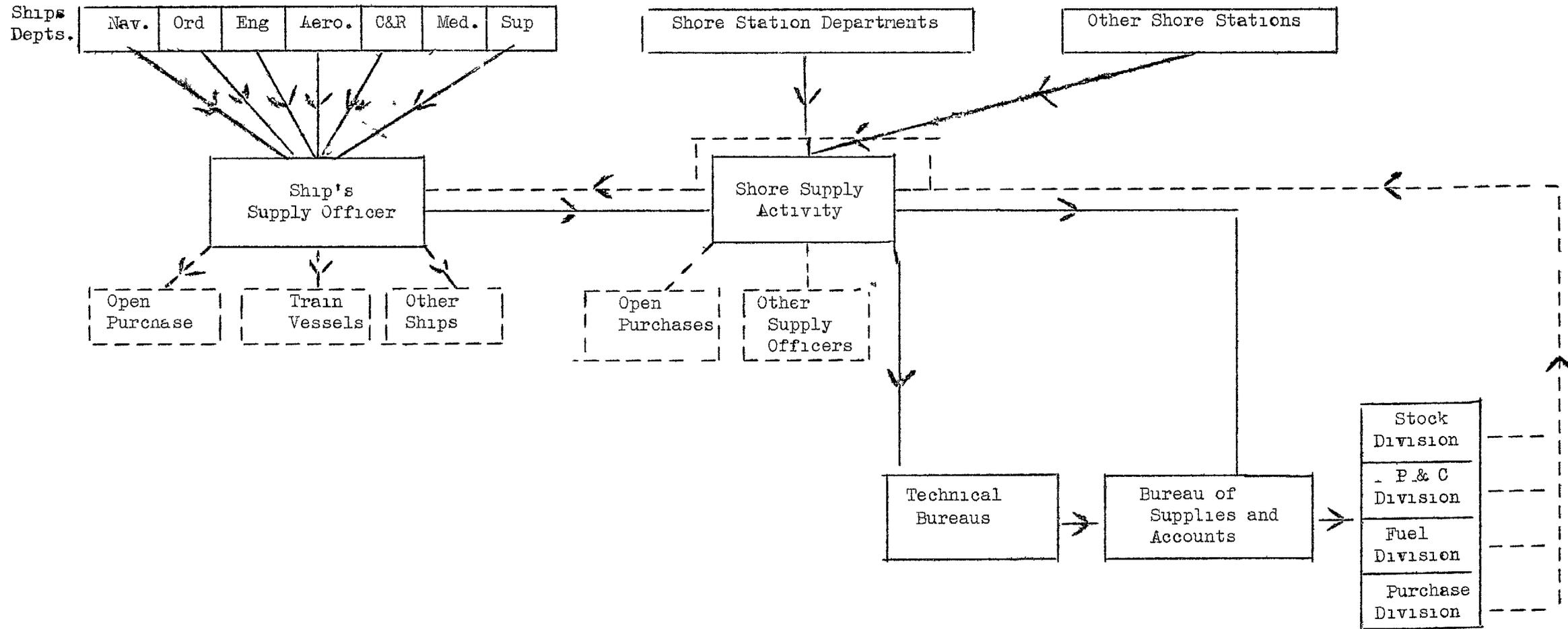
- (1) Renders available to the purchasing agent the best technical and legal service of the Navy,
- (2) Promotes uniformity and improvement of method,
- (3) Keeps the purchasing officer in close contact with the Department so that changes in Departmental policies may be immediately reflected in action taken;
- (4) Promotes cooperation with other government departments; and
- (5) Provides a central contact point for contractors, actual and prospective.

I would ask you further to note that the officers of the technical or material bureaus, excepting only those of Construction and Repair and Yards and Docks, rotate technical duties on shore and duty in the fleet thus insuring an appreciation of the problems incident to the use of the material when they come in contact with this material in design, development and inspection.

CHART "1"

Steps in Material Supply	Responsible Agency
First Determination of Requirements as to	
(a) Quality and type (specifications)	Each of the eight bureaus individually for the material required in performance of the duties assigned.
(b) Quantity	Same as above except quantity of material to be carried in the Naval Supply Account determined by S. and I.
(c) Time and place	Various bureaus and their field representatives.
Second Acquisition of material by	
(a) Manufacture	Various bureaus for material required in performance of duties assigned their jurisdiction.
(b) Purchase, or	Bureau of S. and I. and its field representatives. (Some exceptions)
(c) Transfer	Same as acquisition by purchase.
Third Inspection of	Various bureaus for material used. (Navy Inspection Service).
Fourth Payment for	Bureau of S. and I. or its field representatives disburse public funds. Appropriation of bureau for which used charged with cost.
Fifth Storage and distribution of	Bureau of S. and I. and its field representatives (Some exceptions)

CHART "B"



DISCUSSION FOLLOWING LECTURE
"THE NAVY SUPPLY SYSTEM"

by
LT. COMDR. W. A. BUCK (SC) USN

Dec. 13, 1935

Part I

Q - Who decides what the supply fund will be - for example the \$74,000,000?

A - In its origin - in the fund as it now stands - that decision was made by Congress in its transfer of the fund. However, it was considerably larger at that time and is being decreased each year by normal stores losses and by what we might call pirating by other agencies of the Department in getting appropriations made from the fund rather than from money on the books of the Treasury. You will note that this year there was a transfer of \$8,000,000 ~~from the books~~. With an expanding Navy and ~~the~~ rising price levels it is possible the fund will not be large enough to permit of its use as it is, ~~proposed and~~ that will mean we will have to ask for an increase or quit buying certain items out of the fund. Further, if we increase the scope of items ^{and above} over things we now buy we will have to have a larger balance to make a smoothly working fund.

Q - What is the history of the attitude of Congress toward the revolving fund and is there a possibility that it may be changed?

A - I can't answer as to the probability of Congressional attack. The attitude toward the fund has apparently been ~~what you might class as~~ favorable. There has been no particular expression of criticism from the Appropriations Committee of Congress toward the use or management of the fund. I think that \$600,000 Japanese issue might be of interest as throwing some light on the fund. At the time of the disaster the

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Navy went ahead and issued material under a more or less tentative agreement with the Red Cross that they would reimburse it , but there had to be quick action and it was necessary to go ahead and worry about the payment later. When it came time to settle up, the Red Cross asked for a national contribution and they reversed themselves, stating that all the people in the U. S. had contributed and they thought the Federal Government should do likewise, and that they did not intend to reimburse the Navy. There was nothing for the Bureau of Supplies and Accounts to do but report it to Congress and they did nothing about it. They didn't say we should not have done it nor did they say it was all right. It was a more or less tacit approval. Their concept is that it permits a business-like administration of the Naval force. They realize there is a cost incident to carrying material in store and that it is necessary for the Navy to carry large stores in order to be mobile. As yet they have raised no particular criticism or objection to the cost.

Q - I would like to know whether I am correct in my assumption from the figures on the board. It seems to me that all the money in the annual appropriation act for the fiscal year 1934 was expended from that appropriation, and the total of the fund, and the account at the end of the fiscal year was less than the sum of the fund in the account at the beginning of the fiscal year. It means that the Navy Department spent more money than Congress appropriated.

A - There was the cost of maintaining material that does not show - the cost of maintaining that reservoir of material, obsolescence cost, loss by inventory, etc. That was a bad year, there have been years

when we gained. The operation of the fund has resulted in an increase rather than a decrease.

Q - If this thing were repeated over a period of years the fund would disappear and Congress would have to build it up again which would be a fiscal year appropriation?

A - I was told that in 1935 there was a gain in the fund aside from the transfer of \$5,000,000.

Q - Does the Bureau of Supplies & Accounts have custody of those first four items?

A - It has the custody of guns and small arms in store, but not mines and torpedoes.

Q - Would S & A carry the guns?

A - The ^{gunnery} officer renders a property return for the quarter for ammunition. He goes around to the Supply Officer to find out how to make it out - but he makes it out.

Q - Does the Clothing and Small Stores section have another fund?

A - Yes; it is entirely separate from the Navy Supply Account Fund.

Q - (What is the title of) the Naval Working Fund?

A - That is another fund - of a slightly different complexion. It is authorized to cover the cost of work done for other Government departments, for civilians, or cost of sales. It is merely an account wherein we credit deposits made to cover estimated cost of work; we charge the cost of the work from which we estimate, to the man for whom it was done, the balance, it is not exactly the same as a revolving

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fund. There is nothing set aside on the books for it. It is really the authorized method of account for cost of sales.

Q - Does the Bureau of S & A actually purchase all supplies for the Navy?

A - The purchasing function is executed by the Bureau of S & A with the exception of those items purchased by Ordnance - guns and ammunition. That does not include the exceptions Yards & Docks have for construction materials where labor and material is involved, and construction of new ships.

Q - If a particular appropriation for a given fiscal year is not expended or obligated, does that go to the fund or does it lapse?

A - It lapses unless a special Act transfers it over - as was done in 1920. That is the way the present fund got a start.

Q - Will this fund ever be used for initial equipment?

A - What do you mean by initial equipment?

Q - For instance, you are building a new ship and it requires a battle allowance of ammunition. Would you transfer it?

A - No. At the present time there are a number of vessels being constructed in Navy Yards and the Navy Supply Account Fund is financing material for those vessels. When it is used for the building it is charged to the appropriation and the Fund credited. I understand something like fifteen or twenty million dollars of the fund is used now for that sort of transaction. It makes it simpler for the Bureaus to have their purchases charged this way.

Q - Has the Comptroller General ever seriously interfered with the administration of the fund? For instance, this Japanese relief?

A - He has not seriously interfered. However, we has asked some questions.

Q - Will you say something about deductions by inventories and deficiencies?

A - The loss by inventory is the difference between the stock on hand and the books.

Q - How could you have a difference of \$30,000? What happened to that?

A - If they knew, that difference would not be there. It is due to the tremendous amount of material involved - loss due to mistakes. That is not a normal amount, that particular sum is a large one and next year it will probably be a much smaller one. It is bookkeeping mistakes that bring up the losses and gains. The deficiencies are charges that arise from claims that have finally been settled that are chargeable to appropriations, but unappropriated balances are credited to the fund. Therefore any claims settled by the Accounting Office properly chargeable to the appropriation are charged to this fund rather than deduct^{ed} from the fund the amount charged from the appropriation. It is because of the fact that the fund has been increased by turning over to it unobligated balances of appropriations of former years, and they are properly chargeable.

Q - Do you cover anywhere in your talk the item of price adjustment?

A - No, that is done by survey of obsolete material and issue

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at a reduced price.

Q - In other words, in taking your inventory you have a certain price. Is that considered under this item of price adjustment?

A - If an item has been in store such length of time as to become damaged or obsolete, we may hold a survey and reestablish a price which means a loss.

Q - Do you readjust prices without surveys?

A - No, we do not readjust prices for loss without authority.

Q - But you can raise them?

A - The normal practice is to strike an average at the time the new goods come in.

Q - How much of the fund is cash? ^{A -} /I think it was \$24,000,000 on June 30, 1934. I can't give you the 1935 figures, they are not released until Congress has seen them.

Q - Is the reserve in addition, or is this your total?

A - The Naval Reserve Account is one and a half million now. It is not used actively.

Q - What about your war reserve?

A - This is really the war reserve, you can consider available material as a reserve for the early days of the war period.

Major Kelton I would like to ask if anyone ^{in the Ord. Dept.} knows the value of the war reserve for the Army? How about the Quartermaster Corps? Does anyone know the value of the stock? I think it would be good to get those figures to see if our reserve is higher or lower.

Q - Suppose you disband a ship, do you take that property back in your Navy Supply Account Fund?

A - Material in store aboard ship at the time the ship goes out of commission is in the Naval Supply Account. It is merely transferred ashore in the same account. Equipage was charged against the proper appropriation and goes against the appropriation account when it is turned in. Equipage is the used material; it does not go back into the Naval Supply Account.

Q - Can any definite statement be made as to the point in the supply of the Fleet to which the appropriation is charged in the Naval Supply Account Fund or does it vary?

A - When the material is issued for use. Departments do not maintain store rooms on board ship. When the item is drawn by a department, that is when the charge takes place.

Q - I understood you to say that if a ship were put out of commission some of the stores are already in the Naval Supply Account Fund.

A - Yes, awaiting the demands of the ship's department.

Q - Am I right in this question of clothing - is that held on the books of the Treasury Department?

A - It is money to the credit of that fund on the books of the Treasury Department.

Q - It seems to me that would involve a great deal of book-keeping. Wouldn't it better to keep it in one account? What is the object of 4 or 5 different accounts? If the Army had anything left there we would probably lose it.

A - We only have two of this kind which we operate.

Q - Is not one reason for having the Clothing and Small Stores separate the fact that it is sale and not issue, and that the money comes back?

A - Yes. The issue of clothing and small stores to the enlisted personnel is sale by checking against the man's pay account. It is not a charge against the appropriation.

Q - That relief and disaster situation is something that faces the Army and Navy every once in a while. Did the local commander of the Navy get pretty quick action in placing those supplies in the hands of the Red Cross or get prior authority from the Navy Department?

A - He got authority from the Navy Department - by radio.

Q - The Mobilization Plan calls for an immediate increase in the Naval Supply Account Fund?

A - I believe that is the plan of the Bureau of S & A. It is the first thing they would do in order to allow the placing of orders on M day; the appropriations could come later, the specific object appropriation would come later. We want authority to place the orders, and all we need is an increase in the Naval Supply Account.

If there are no more questions I shall proceed with the next topic.

Part II.

Q - What is the authority for placing invitations for bids for materials not on the approved list?

A - It is the standard purchase authority. Materials must be

what you want. It is the only way to get satisfaction, without tremendous detail, to see if what you did get is what you want. There are a lot of characteristics of material that cannot be determined except by operating it, therefore we have been allowed to use that method. The legal basis for it is questionable.

Q - I would like to find out just how these bureaus get together. As far as I can make out they always do right and everybody admits they know best. Suppose sometimes there arose a difference of opinion; suppose one of them provided a technical item of equipment that they said was best for the Navy, and the operating personnel of the Fleet does not like it, but the Bureau still insisted that was the way it should be. Is there anyone short of the Secretary of Navy who can settle that difference of opinion?

A - As an absolutely final arbiter, no, unless they can agree among themselves they must go to the Secretary. I don't think any of them go.

Q - What is this Central Engineering Laboratory to which you refer?

A - An engineering experiment station at Annapolis which has certain equipment and material, and ^{there is a} research laboratory in Beltsville. Maintenance, fuel testing, and ships' drafting equipment are in the Philadelphia Navy Yard. They have various localities for special things.

Commander ? . I think that question of possible disagreement is being gradually taken over by Fleet Maintenance. It represents a clearing house for ideas and they are trying to get centralized I think it will develop into an actual control.

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A - Captain Fairchild was looking for absolute authority and there is none except the Secretary. The Fleet Maintenance Division tries to get them together and they try to get together themselves.

Q - You spoke about other Government departments being able to use the Fleet Inspection service. Do they use the accepted list of approved material too?

A - No, it may be used sometimes but there have been cases where they wanted to and McCarl wouldn't let them.

Q - You refer to the "using activity" as determining the quantity, etc. of an item. Is there anything meant by using activity other than the bureau?

A - I meant, for example, the chief engineer of a ship who is the representative of the Bureau of Engineering. If he wanted a special item not on the allowance list he, in originating his requisition, would state the quantity he wants.

Q - In regard to the keeping ^{of} accounts stored by the Bureau of Medicine and Surgery, and by Ordnance, does the Supply Corps have anything to do with those?

A - The Supply Corps does not keep accounts for the Medical department but does for Ordnance stores. In the Paymaster General's Annual report there is a table which shows the standing of the Naval Medical stores - money value, etc.

Q - There is no budget procedure there?

A - The budget problem for each chief of bureau is to make estimates for the cost of expediting his function during the fiscal year

in accordance with the plan which Admiral Johnson told about yesterday. It is approved by the bureau chiefs in conference and becomes a directive. Then each bureau chief makes an estimate of the money required for that, it is submitted to the Budget Officer of the Navy Department, who is under the Secretary, and who attempts to get them together and lined up within the amount the President's Budget Officer says is going to be made available. If there is any force to be applied it is applied by the Secretary. Their budgeting as regards the Naval Supply Account Fund is that the Bureau of S & A depots are department stores. They buy there rather than from civilian sources, they go to the Navy at the time they want the item rather than go outside.

Q - Who is responsible for the safe keeping of Ordnance material in dead storage?

A - The Bureau of Supplies and Accounts - but not ammunition or gun powder. It is stored in the Supply Department at Washington, which is the biggest Ordnance factory.

Q - You said each bureau figures its own requirements.

A - Except for Naval Supply Account material.

Q - Who would buy that? A - The Bureau of Supplies and Accounts.

Q - What about this denatured alcohol?

A - The stock to be kept is a function of the Bureau of S & A and its field representatives.

Q - What about inspection?

A - That is performed by the activity at the time the item is received at the request of the Supply Officer of the activity which has the proper testing facility.

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Q - Is the ~~procurement~~ ^{Bureau} responsible or the Bureau of Supplies and Accounts?

A - The department or activity at which the material is received is responsible to see that it conforms to specifications.

Q - Storage and issue?

A - The Bureau of S & A and its field agencies.

Q - I would like to get clear about acceptable items. Does it have legal approval and is there any reason the Army can't do it too?

A - I don't know why the Army can't use the same system, as to the legal basis, it is questionable, and the less said about it the better.

Q - The AirCorps maintains an approved list of bidders on some thirty or forty different items with the sanction of the Comptroller General. It has been declared proper by the Judge Advocate General.

A - That is easily gotten around; we have the same thing - items that are similar to a trade brand . If you want a steam gauge you write a specification for a steam gauge - not a Crosby steam gauge If Crosby has it, you get a bid. You don't say "similar to Crosby's". It is the establishment of quality by having it tested to save time in the procurement.

Q - What is the character of your inspectors, do you encounter the same difficulties that General Gibson spoke of? And is fuel oil under the Treasury Department?

A - Fuel oil is a Navy contract, gasoline shipped for delivery is a Naval contract. As far as inspectors qualifications are concerned - they may be good and they may be bad - depending on the professional qualifications of the officer.

Commander ? Captain DuBose sums it up like this at the

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present time they have no difficulty with the technical qualifications. There are plenty of people of the market with the necessary technical qualifications and they are able, particularly by Civil Service records, to get fairly good inspectors but in addition there were inspectors that would be hired and paid out of funds not covered by Civil Service rules. At the present time they have no difficulty in getting a high standard in their inspection service.

Commander Buck I have a personal conviction about having inspection at the point of fabrication. It can never be as good as we think it will be. The manufacturer still knows more about it than your inspector will ever know.

Q - Returning to the question on alcohol. It is purchased by the Bureau of S & A; when is it inspected?

A - It is inspected upon receipt by the Navy, the Navy Yard Department makes the inspection when the alcohol is received - not as a representative of the Bureau of Engineering but as a Naval officer ~~and~~ who inspects it for the Navy.

Q - Not for the bureau which will use it?

A - No; it may be for one or six bureaus.

Q - In the Army there are several specifications for alcohol. Does not the same thing apply for the Navy?

A - No, we have one specification in three grades, A, B & C, which have been developed by the Naval Specifications Board.

Q - I understand about 99% of all Naval contracts are let by the Bureau of S & A in Washington. If that is true what is the nature of the purchasing services that most of these field agencies do - open

purchase or emergency purchase?

A - I shall cover that in my next session. If I don't will you reserve that question?

Q - What relationship does the office of the Chief of Naval Operations have to storage and issue. Does the Bureau of S & A consult that office in its storage of supplies purchased? If it is the intention of the Chief of Naval Operations to bring the Fleet to the East coast next summer, does he inform the Bureau of S & A?

A - We hope he would let us know, sometimes we find it out by hearing it from someone else. Last time they made up their minds very suddenly, and almost caught us. That is a peace situation and in peacetime we don't have enough money. Right now Hampton Roads would not be ready unless we had a few month's notice. In war-time, they would be ready. The Chief of Naval Operations should inform the Chief of Bureau as soon as he decides that the Fleet is going to move from one area to another, and the Chief of Bureau of S & A should keep his ear to the ground to find out. If you want to get a fine example of what it means when you are not told, you ought to serve as supply officer to an aircraft unit.

PART III

Q - It might help if you would clarify the situation on board ship in regard to equipage and consummable supplies.

A - We have two general classes of material on board ship; they are both carried in the Naval Supply Account but one category is what you would call consummable material - material that is consumed in its use. For these items the allowance list merely names them - it does

not specify quantity. The quantity is controlled by the money allotment. Items of equipment such as chairs, desks and similar materials which take a longer time to wear out, are called equipage material, and the bureau's allowance lists specify the items by name and number that can be installed. Their replacement is usually made as the result of a survey of the item which has been lost or worn beyond further economical use. The use of those items is restricted by the allowance list which specifies the number, by the survey which is required before disposal can be made, and by the many allotments to which they must be charged if a new one is issued.

Q - The method of allotting funds in the Navy is so radically different from that in the Army that I would like to ask whether it is frequent or infrequent to have allotments changed?

A - They are apt to extend five years or more. There is no change unless there is a radical change in the price level. Battleships have been having the same for the last five or ten years but each fleet and force commander has, in addition, an allotment granted him by the Bureau and authority to regrant that allotment to ships' departments to meet special and emergency needs and each ship competes with the others in getting more of the Commander-in-chiefs' funds. The man who is fastest gets the most.

Q - Will you tell us how the thing works out - this allowing of repair money? For instance, in 1929 they assigned all money for repairs to the commander of the destroyers squadron and he made an allotment to the Navy Yard. Has that since been stopped?

A - As far as I know it is being continued. I have not been

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with the fleet for four years.

Q - In regard to the allotment to ships- does the Bureau of S & A make allotments to ships?

A - Yes; to cover operations of the Supply Department.

Q - I notice in 1934 there were two reorganizations that had to do with the Bureau of S & A , one was the Field Service Division.

A - That was merely taking away from another division part of the functions and making it a separate division. The Field Service concerns itself primarily with the expenditure of Supplies & Accounts appropriations, maintenance at shore stations, the number of personnel to be employed in various departments on shore. It is the shore station that controls the hiring of personnel in supply departments and ashore.

Q - I noticed another reorganization and amalgamation, and board findings which had apparently to do with the strength of the Staff corps.

A - That was known as the Roosevelt Board, it made investigations on many different subjects - organization of the Navy Department, personnel, etc. and they investigate the required strength of the various Staff corps. They did not change the authorized strength, however.

Q - Can you give us the functions of the Finance and Supply school at Philadelphia.

A - It is for the purpose of training new men in the corps - men first coming into the corps and the policy was to list the officers that went there as supply officers. This year there was a limitation placed on the Congressional Act which said that no officer should be so trained with a view to transferring to the Staff corps three years after

graduating from Annapolis, those having more than three years service were commissioned before being sent there.

Q - In regard to 75% of the purchases made by the Supply Corps in Washington - money value. Have you any idea as to what is represented in money? The reason I ask is that I would like clarification of the statement of the Paymaster General that the ratio in Wash. is 7 to 9.

A - I do not have the figure on that. I think you will find included in those figures public works contracts. Where was that statement made?

Q - In the report of the Paymaster General in 1934. It is merely a statement

A - We can get some idea of the money value of those purchases by totaling in this table on the board the receipts in the Naval Supply Account - the total is \$68,000,000 - the total purchase of material of the Navy for that fiscal year.

Q - The Treasury contracts for new construction would be made in Washington? This statement says: "Purchases handled in Washington - so much. Purchases by various Navy officers in the field - - - /

A - The substance items are in the figures I gave you. I think you will find that contained in the total in Washington.

Q - Are the various items on hand in the supply departments of all the ships included in the accounts of the Bureau of S & A?

A - The basic accounting records of the Navy are in the Bureau.

Q - I mean the actual inventory.

A - No

Q - Does the Bureau of S & A have account of the amounts on hand in various shore supply stations?

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A - No, we do not keep any central stock ledger by items.

Q - I understand the Bureau of Ordnance procures special items of ordnance. It has the option, presumably, of manufacturing or purchasing within a legal limitation set by Congress. If a purchase was made would they make it?

A - They might ask the Bureau of S & A to make it but don't have to.

Colonel Jordan Will you please explain the difference between our Finance Department and your Bureau of Supplies and Accounts?

A - I am not sure I can do it correctly because I am not thoroughly familiar with your Finance Department. Apparently we perform for the Navy the same functions the Finance office does for the Army except the Budget function.

Q - How does the Navy handle its property accountability?

A - We issue items of equipage on personal custody, there is no personal accountability for the man who draws it. The Supply Officer in charge of the storehouse is accountable for the upkeep and property accounting by money value.

Q - When you issue chairs, for example, they are charged to the current appropriation? Then you carry the property accountability?

A - The Supply Officer of the ship carries the property accountability records and he is required each year to make an inventory.

Q - Does that cover property bought out of the appropriations of other bureaus?

A - Yes, the central accounting officers represent the commanding officer.