ORGANIZATION AND FUNCTIONS IN THE DETERMINATION OF ARMY REQUIREMENTS

24 September 1946

L47-18

CONTENTS

Page

SPEAKER---Colonel E. K. Daley, Department of Military Art and Engineering, U.S. Military Academy..... 1

GENERAL DISCUSSION..... 18

Colonel Daley

Students

THE INDUSTRIAL COLLEGE OF THE ARMED FORCES

Washington, D.C.

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ORGANIZATION AND FUNCTIONS IN THE DETERMINATION OF ARMY REQUIREMENTS

24 September 1946.

CAPTAIN WORTHINGTON:

The speaker this morning, Colonel Daley, graduated from the Military Academy with the Class of 1928. During World War II he commanded an Engineer Regiment in Africa and Sicily and a Combat Engineer Group in the European Campaign. He returned to this country and was in the Requirements Division, ASF, in July 1945. Before his present assignment to the Department of Military Art and Engineering in the Military Academy, Colonel Daley was Chief, Supply Control Branch, Service, Supply, and Procurement, War Department General Staff.

The subject of Colonel Daley's lecture is "Organization and Functions in the Determination of Army Requirements".

COLONEL DALEY:

Gentlemen: I wish to express my appreciation for this opportunity to address The Industrial College for a second time. When I lectured before the college, last spring, I was Director of the Requirements Division (successor to the Requirements and Stock Control Division), Headquarters, Army Service Forces and as such I was dealing with the subject of my lecture on a day-to-day basis. My present duties at West Point are not so closely connected with this question; but the historical research to which I am devoting most of my time serves further to re-emphasize the importance of logistics in war. The fact that I am viewing my subject from a more detached location may well prove to be more advantageous than otherwise. After all, within a single lecture period I can hope to give you only the broad outlines of the problem of determination of Army requirements and how it was solved. A degree of detachment will, I hope, add objectivity and prevent over-emphasis of details.

This lecture will confine itself to the determination of requirements for items of supply for which Army Service Forces had supply responsibility. The Army Air Forces had supply responsibility for items of peculiar interest to the Air Forces and developed a system especially adapted to their needs. I note that you will have a lecture on determination of AAF requirements, tomorrow.

The major emphasis of my discussion will be on the system evolved from war experience which was in effect on V-J day. While I shall touch upon the changes which have taken place since that time, I wish to invite your attention to the fact that while some of them are improvements which would have been inaugurated even if hostilities had continued;

others represent adaptations to the lessened tempo of peacetime operation or concessions to reduced administrative budgets. Before concluding I shall cover briefly the aspects of the problem which I consider most susceptible of further improvement.

General Eisenhower has stated, "It is logistics which control all campaigns and limit many". Certainly the proper determination of requirements is an essential and consequently vital part of logistics. It is not necessary to elaborate further to an audience with your background on the importance of an adequate solution to this problem, but it may be advantageous to remind you just how far-reaching are the effects of such determination. We normally think of requirements in terms of their impact upon procurement programs, and if that were their only influence it would still justify a great deal of attention to the subject. But determination of requirements is essential to proper programming of many other supply operations. The determination of excesses and surpluses naturally goes hand in hand with the determination of future procurement needs. When the requirements for an item have been computed and balanced against expected assets you seldom find the supply position of the item in perfect balance. There is either too little which means initiation of procurement, or there is too much which means redistribution as excess or disposal as surplus. Turning to another field, that of major maintenance it is obviously impossible to make a sound priority allocation of repair facilities until you know which items are going to be in long supply and which in short. When we consider storage, we shall see that under the ASF method of computing requirements it is possible to predict dollar-wise the future inventories in the Zone of Interior depot system. By converting these figures into square feet of storage space it is possible to predict the future storage load at any given date. And in the weeks prior to V-J day we were engaged in studies to see whether, by a similar conversion, our prediction of overseas requirements could be converted to an estimate of future ship tonnage needs. The end of hostilities came too soon for us to complete the study with reliable data; but it is certainly possible, in theory at least, to achieve such a result, even though it may be used as a check upon, rather than as a replacement for, the present method of computing shipping needs.

In ASF the mechanism for determining requirements was called the Supply Control System. To quote ASF Manual M-413, the authority on the subject, "The objective of the Supply Control System is to provide a systematic means for maintaining the best possible balance between total supply and total demand." With this in view the system was designed to:

a Assure provision of needed supplies on time.

b Prevent the accumulation of excess stock.

c Determine quantities of total stock on hand which are available for redistribution or disposal.

That, I believe is a very simple and concise statement of the problem. This simplicity of statement is matched only by the complexity of its solution when we realize: that it had to be applied to almost a million different items for which ASF had supply responsibility; that the time needed for procurement and distribution required the projection of the supply balance well into the future; and that a workable system had to meet the test of the constant and frequently unpredictable changes of a global war.

Having stated our mission, we will now turn to the organization which as of V-J Day was involved in the determination of requirements for an item.

(Referring to Chart "A")

We find four successive levels. The duties and responsibilities of each one are outlined on this chart. The top level was the War Department General Staff. That was responsible for basic assumptions and supply policy.

The next level was ASF, which was responsible for issuing detailed instructions for computations supplying additional planning data (for example, requirements for Navy and International Aid came in directly to ASF instead of going to the War Department), and refining supply assumptions. Frequently, War Department directives required further interpretation before being handed to the Technical Services. In addition, the ASF Staff level had the responsibility for the review of supply control studies and the supervision of supply action based upon those studies.

Moving down to the next lower level, we come to that of the basic agency of the War Department responsible for the determination of requirements; in other words, the Technical Service level. Ordnance was responsible for determining requirements for trucks; Quartermaster Corps for combat boots; Engineers for angledozers, and so forth.

I might also point out that each Technical Service had the responsibility for maintaining adequate supply data, exchanging data with other interested technical services, preparing Supply Control Reports, and taking corrective action when those reports showed it to be necessary.

The technical service's responsibility for supply control was exercised by agencies known as stock control points. A stock control point is an office of a technical service to which has been assigned the mission of maintaining supply control data and of preparing supply control studies for certain categories of the items for which the technical service has supply responsibility. It accomplished its mission by assembling (from other offices of the technical service) item-by item procurement data, depot inventory and issue data, repair data, and other

pertinent information, and then it correlated these with planning data furnished in the Supply Supplement and in the instructions from Hq. ASF, previously mentioned, into an integrated supply study for each item.

It would be well at this time to bring out one salient feature of the Supply Control System. This is the conception that "all essential data concerning the supply and demand status of an item be compiled, kept up-to-date, and consolidated in a central location in a form which will provide the maximum utilization by those charged with responsibility for performing or supervising the supply functions." Let me underline the importance of this. Prior to the evolution of the system there was one piece of paper which told what the requirements of an item were supposed to be; another which gave information on depot inventories of the item; a third which had to do with its procurement schedules. Frequently no one person ever saw all three. When he did, the methods by which the computations were made varied so much that it was well-nigh impossible to relate data on one phase of the supply program with that on another phase. The Supply Control System assembles these various independent computations and reports into a single study which takes into consideration all the elements of supply and demand, and in so doing it achieves uniformity both of computation and of interpretation. Whatever changes the system may undergo, that concept should be retained.

Going back to our basic objective, we said it was to secure the best possible balance between total supply and total demand. In continuing this discussion we will now turn to the various elements of demand as they existed on V-J day. We take them before the elements of supply because they come first on the Supply Control Report Form.

(Referring to Chart B)

Looking at this chart carefully, you find that there is a breakdown into two parts: "Issue Demands" and "Levels and Reserves".

The "Issue Demands" section of our chart is divided into four major groups: The U.S. Army demands, Navy demands, "International Aid", and "Other".

The U.S. Army demands are again subdivided into the following groups: "Zone of Interior","Theater of Operations (excluding operational supplies)"; "Operational Supplies"; "Assembly, Conversion, and Modification;" Demand as a Substitute;" and "Other".

Now it may occur to you that, since Items A-1, A-2, and A-3 all represent requirements for troop supply somewhere in the world, why did we not lump them all together. In order to explain that I have to go a little bit into the actual mechanics of making supply control computations. To determine initial issue requirements for the nonexpendable items of troop Supply we normally took the Tables of Equipment quantities or those

CHART A.

ORGANIZATION FOR SUPPLY CONTROL "WORLD WAR II"

(EXCLUSIVE OF ITEMS FOR WHICH AAF HAD SUPPLY RESPONSIBILITY)

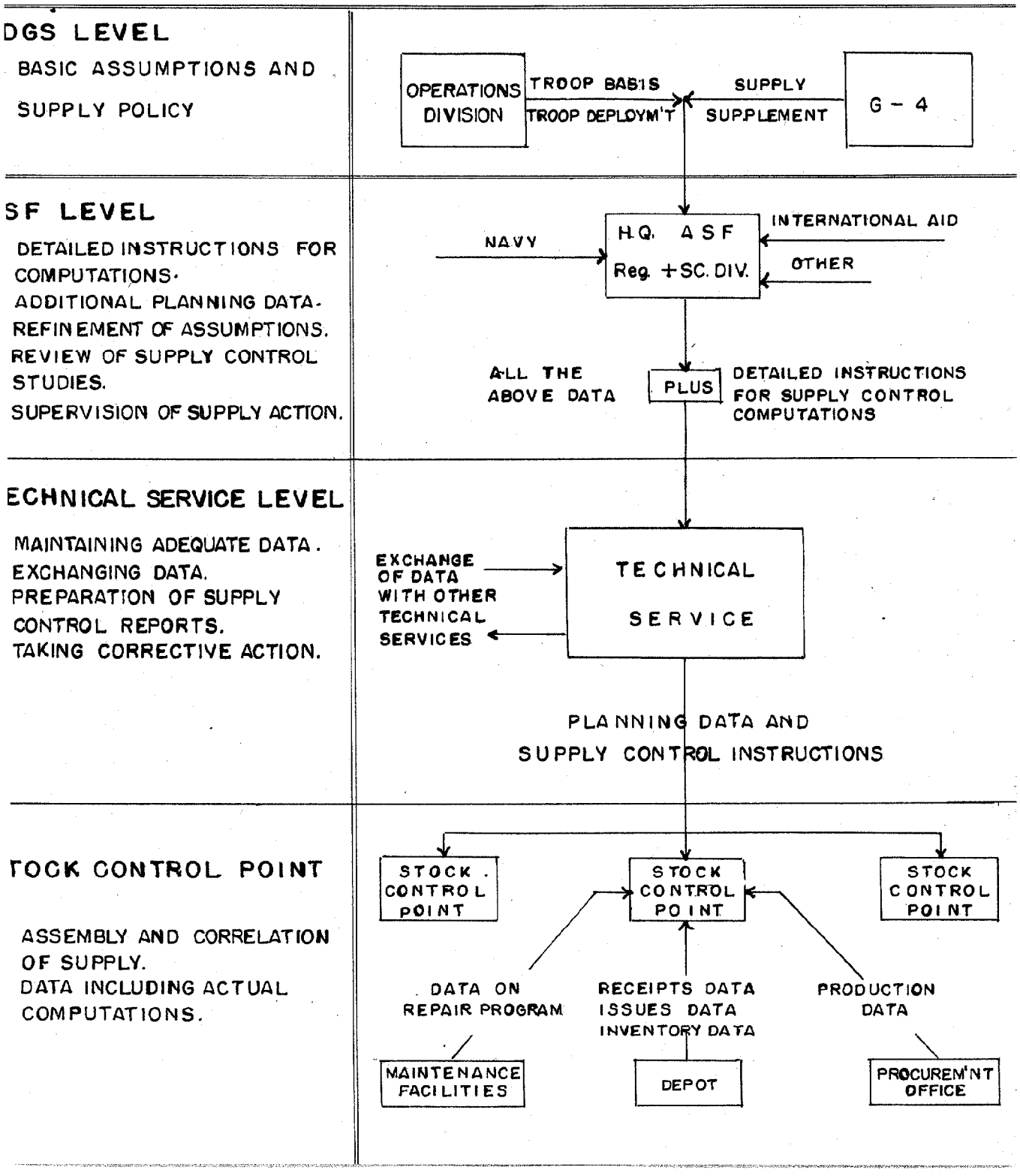

CHART "B"

ELEMENTS OF DEMAND

I. ISSUE DEMANDS

A. U.S. ARMY

1. ZONE OF INTERIOR

2. THEATER OF OPERATIONS (Excluding Operational Supplies)

3. OPERATIONAL SUPPLIES

4. ASSEMBLY; CONVERSION; MODIFICATION

5. DEMAND AS A SUBSTITUTE

6. OTHER

B. U.S. NAVY

C. INTERNATIONAL AID

D. OTHER

II. LEVELS AND RESERVES

A. STOCK LEVEL

B. PRODUCTION RESERVE

C. EQUIPMENT RESERVE

from authorized lists of equipment and made a machine run against the total number of units in the troop basis. You must remember that for any one unit there might be two times when this requirement arose first when the unit was initially activated and a second time when pre-shipment was used and the unit arrived in an overseas theater.

Besides this, we had a second type of demand, that for replacement. In other words, after the equipment was in operation you had to replace that which was worn out, destroyed, lost or otherwise done away with.

Both of these--the initial issue demands and the replacement demands-varied from the Zone of the Interior to the overseas theater and among various overseas theaters. For example, for units activated in the United States you might not issue 100 percent of authorized equipment if there was any shortage of such equipment. The same variation took place in connection with replacement. It was obvious that materiel would wear out faster in Burma and India, for example, than in the United Kingdom. Such variation in the replacement factor was a function of the combat activity (or lack thereof) in the theater; it was a function of the climate in the theater; also, it was a function of the adequacy of maintenance facilities.

When we move down the chart to A-3, "Operational Supplies", that is a different type of demand. For certain specific War Department- approved operations, oversea theaters furnished operational requirements in the form of approved projects or in the form of special lists of equipment. Each of these was very definitely a one-time demand and was tied into its particular operation. If the operation failed to go off, you did not have that demand at all. Consequently, it was always advisable to segregate the computing and reporting of such a demand from the other requirements.

The demand for assembly, conversion, or modification came about where there was dual use for an item; where an item might be needed for issue in itself and also where it might be needed as a component for a more complicated item. We will take, for example, a flame-throwing tank. Tanks were issued by the Ordnance Department as basic items for troop issue and at the same time there was a demand for these tanks from the Chemical Corps as components for conversion into flame-throwing tanks.

I think "Demand as a Substitute" is self-explanatory. If we did not have enough of a preferred item it was obviously necessary to take some less- preferred item and use it.

"Other", as far as U.S. Army demands were concerned, covered such requirements as the Manhattan District, civilian supply in areas where the Army still had responsibility for civilian administration, and bulk transfers from technical service control to the Army Air Forces.

Turning to U.S. Navy demands, the first thing to note is that the Navy computed its own demand and furnished us with the results of the computations. We did not attempt to compute the Navy's demands. Those Navy demands were sent to the Requirements and Stock Control Division and were checked there for compliance with policy. If they complied with policy they were transmitted directly to the technical services which incorporated them in their supply studies.

International Aid followed very much the same pattern except that, since there was a division in Headquarters, ASF, (International Division) which had basic interest in international aid; requirements for that purpose were transmitted through it to the technical services.

Finally, we come to "Other" issue demands. In this particular case it meant such Federal agencies as the Office of Strategic Services and the Foreign Economic Administration.

That concludes the "Issue Demands".

We also had another section known as "Levels and Reserves". The first subdivision was the "Stock Level". Since the Zone of Interior depots acted as reservoirs to equalize the peaks and valleys in receipts and out-shipments, it was necessary to allow them to retain operating stock levels. Such stock levels, in the general case, amounted to from 60 to 90 days of predicted future issues of an item.

We come next to the "Production Reserve". To explain it we have to go back to our objective. Our objective was to maintain a balance between supply and demand. We endeavored to keep that balance current at all times because if we did not we could not meet abrupt changes in the world situation without the danger of accumulating large surpluses. But, for certain good and sufficient reasons, we authorized the temporary relaxation of this normal balance and permitted quantities of certain items to be scheduled for procurement at earlier dates than the demands for them were expected to materialize.

Two good justifications for production reserves were: first, when there was a small present demand but a very large future demand, and the capacity of existing facilities was more than adequate to take care of the present demand and totally inadequate to take care of the future demands, it was better to build up stock then than to have to build some facilities in the future; the other justification arose where it was better to go into the market and buy all you needed of a certain item and then get out, rather than to maintain a buying program over an indefinite period (but that justification had to be approached with great caution).

Finally there was the "Equipment Reserve" which usually came to us in the form of a directive to stock equipment for, say, so many divisions

CHART "C"

ELEMENTS OF SUPPLY

A. STOCK ON HAND (RFI)

B. RECEIPTS FROM PROCUREMENT AND ASSEMBLY

C. SUPPLY FROM SUBSTITUTES

D. RETURNED STOCK

1. Serviceable without Repair

2. After Repair

and so many other units, when and if they should be activated, in order to give the supply program sufficient flexibility to meet contingent changes in the world strategic picture.

Turning from the elements of demand to those of supply we find them much less complicated and practically self-explanatory.

(Referring to Chart C)

We have, first, "Stock on Hand (Ready for Issue)"; second, "Receipts from Procurement and Assembly"; third, "Supply from Substitutes" (which, of course, matches this "Demand as a Substitute" (on Chart "B"); and, last, "Returned Stock".

There is only one important thing to note on the Returned Stock and that is the subdivision into "Serviceable without Repair" and "Serviceable after Repair." That is important because it ties right back into what I told you earlier about the necessity for interlocking all supply operations. It did not profit us to estimate returned stock serviceable after repair as an asset unless we knew: first, that we were going to get the stock back in repairable form; and, second, that the capacity of the maintenance facilities would enable us to repair it in time to meet the demand.

We have now reviewed the principal elements of demand and supply. The accuracy with which we calculated their impact upon an item determined the fineness of the balance we achieved. But remember that our supply control system had to achieve this balance to a greater or lesser degree for almost a million items. To bring the supply control system within the realm of economic practicality two decisions had to be made: the base at which the effects of the demand and supply factors should be measured; and the degree of refinement to which the control studies would be applied for various item.

The measuring base selected was the supply status of the item in the Zone of Interior depot system. This was selected because information from these depots was readily and quickly available to the stock control point in the form of punch cards which machine records could convert to a national tape. Selection of any other base would have made it much more difficult to secure truly comparable data and it would have made any data obtained much less current. Having selected this measuring base, in order to make the supply control studies accurately representative, all elements of supply and demand had to be computed on the basis of their phased effect upon the depot system. In other words, receipts from manufacturing facilities were not phased into the supply system as assets at the time they were accepted at the facility but at that later date at which they were picked up at the depots as "ready for issue." Oversea demands were not phased into the supply studies at the time the users placed requisitions for the items on their local oversea depots, nor yet at the time the items were shipped from U.S. ports; but at the earlier dates at which the items

had to leave the Zone of Interior depots in order to pass through the supply pipe-line and reach the user when he needed them. This is a most important thing for you to remember when you go more deeply into this system and particularly when you examine the supply control studies made under it. The picture presented by one of these studies is that of the supply status of the item at the level of the Zone of Interior depot system.

The second major decision had to do with the degree of refinement to which supply control computations were to be applied. May I state the difficulties we had to surmount. First, we had those several elements of demand and supply I have discussed; then, we had the involved problem of phasing to determine the timed effect of each one of them on the supply status of an item at the depot level; finally, we had the tremendous number of items to be controlled. To carry out the detailed study which I have outlined on each of almost a million items at reasonably frequent intervals would entail an administrative burden which could not be supported with available manpower nor justified by expected results. While such a detailed study was obviously worthwhile for a tank, it was equally uneconomic for a part to a field range. Yet to insure supply and avoid waste both the tank and the field-range part had to be brought under some degree of control.

The solution arrived at represented an application of the principle of economy of force to the field of supply. First, we made division of items into principal and secondary items and a further subdivision of the secondary items into major and miscellaneous secondary items.

To select principal items (some 1800 in number) we applied the following criteria: there must be a large monetary value of stock on hand in the depot system; the items must be ones which had substantial procurement objectives; or lastly, there might be items which did not fulfill those qualifications but still were of absolutely vital strategic importance. It was not necessary, for an item to become a principal item, for it to possess all of those qualifications. It could possess one of them to a preeminent degree or could possess all four of them to a relatively high degree.

Next we turn to the major secondary items. The same criteria was applied to select them but in a lesser degree. There we determined upon a group of some 40,000 items.

Finally, we had our miscellaneous secondary items which contained the bulk of all our items (over 810,000 in number). These were the ones which met those criteria to the least degree and were, consequently, given the least amount of supply control.

Returning to the principal items, remember that each month all principal items were subjected to a complete supply control study in

which the individual and properly-phased effect of each of the elements of demand and supply was taken into consideration. Once a month we had a complete supply control study made, which was prepared in the technical service by the stock control points. Preliminary copies were sent up to Headquarters, ASF, and distributed to all interested staff divisions. After a period of study and analysis, a review meeting was held under the auspices of Requirements and Stock Control Division at which the studies were approved or corrected, the validity of the elements of supply and demand were challenged and, the supply action which should be taken was determined upon. These studies were all published in Monthly Progress Report No. 20. I do not know how many of you have seen copies of MPR-20 but they are very impressive-looking volumes, which devote one page to each principal item; one volume to each technical service.

(Referring to Chart D)

To give you a general idea what the Supply Control Form looked like, I have a blow-up of the form for an entirely fictitious item, the Widget M-413. Now, naturally, I do not expect you to take away with you any of the complexity of the lines and columns that appear there on the chart. However, there are a few salient points I do think you should carry away. Until after V-J day one of these forms (for principal items) was prepared each month. This Supply Control Form, gives consideration to the phased effect of each of the elements of demand and supply. In Area II, we looked at the historical performance of the item. After all, we were making a theoretical computation, and as a check upon that it was always advisable to look back at the history of the item.

If the chief of a technical service was predicting large demands and using that as a basis to carry on an extensive procurement program, it was very refreshing at times to look back here (in Area II) to find out what the record of his issues had been. Or to go back to reports of three or four months before and say, "You predicted you were going to issue 2,000 of these Widgets. In the past three months you have issued only 150 of them. Don't you think you had better take another look at your present predictions of future requirements? Maybe they're off just as much."

We have there (pointing to Area III) two directly measurable quantities namely, current unfilled demand and stock on hand. The current unfilled demand represents the unfilled requisitions at the Zone of Interior depot. These are the things for which you have a demand and which you have been unable to supply. Then, the stock on hand (ready for issue) represents the quantity of an item in the depot system which is available. Normally speaking, there should not be any current unfilled demand for an item when there is stock on hand, unless a very large demand happens to come in just at the time the supply study is being computed.

Over in this area (indicating Area IV) are the predictions of what our future requirements are going to be. If you were closer and could read this, you would find it covered the same elements of demand we mentioned before--U.S. Army, Zone of Interior, theater of operations, Navy, International Aid, and so on. At the time this form was used we made predictions for the next three months, by months, then for each of the following two quarters and, finally for the first and second halves of the following year. When we had a long lead-time on an item, such as in the case of tanks (which amounted to as much as 18 months) it was obvious we had to carry the projection of demands far into the future.

I might say in passing that developments to the present time have changed this form because you have different demands now. You no longer have International Aid. On the other hand, you may have additional reserve demands, such as War Department reserve stock and things of that nature. So, today, there is a change in the form but the principles have not been materially altered.

These forms were filled out by the chiefs of the technical services, who had basic responsibility for their preparation. Checking the validit of every entry for each item was the responsibility of one or another of the staff sections of Headquarters, ASF, so each staff section scrutinized entries over which it had staff supervision with a view to determining whether proper supply action was being taken. For example, the Distribution Division looked at the past issues; they looked at the current unfilled demand, and they looked at the stock on hand to determine the validity of the entries. The Production Division was interested in the receipts from procurement and assembly and also in the production reserve. The Research and Development Division was interested in the demand as a substitute and the replacement from substitutes. The Maintenance Division was interested in the returned stock after repair. Other divisions had an exclusive interest in one or more lines, or they had joint interest. And, finally, the Requirements and Stock Control Division had a basic interest in this whole area (Area IV) of Prediction of Future Requirements, in addition to its responsibility for the integration of the program as a whole.

The secondary items received no such detailed study. We used a different method of approach. The secondary items, both major and miscellaneous, were grouped into categories of closely-related items of like supply characteristics. Each category had its manager at the stock control point. He had a card for each of the items. The information on those cards was much less comprehensive than I have shown you on this chart (Chart "D"). It covered stock on hand, receipts, past issue and future procurement.

The stock control category manager's operation was as follows: he made a cyclical review and as he came to each card he looked over the items past supply history and determined the average issues for

CHART "D"

CONFIDENTIAL

SUPPLY CONTROL

CONTROL APPROVAL SYMBOL CC 10

ITEM: Widget, M-433

CLASS OF SUPPLY: 4

SUBSTITUTES FOR THIS ITEM ARE: Widget M2

ITEM NUMBER: 891,300

UNIT: Each

UNIT COST: $1,000

STANDARD DOLLAR WEIGHT: $950

INFLATIVE: Y

X CLASSIFICATION I / CLASSIFICATION II

X CONTROLLED / UNCONTROLLED

DATE OF REPORT: 31 March 1945

AREA I - IDENTIFICATION OF THE ITEM

LINE NO.	1945 Feb (A)	Mar (B)	1 Jan. thru 31 Mar. (C)	FACTOR (D)	CURRENT UNFILLED DEMAND (E)	P	Apr (G)	May (H)	June (I)	3rd Quarter (J)	4th Quarter (K)	1st Half (L)	2nd Half (M)	(N)	LINE NO.
				ISSUES AND ISSUE DEMAND											
				U.S. ARMY											
1	7	9	21	ZONE OF THE INTERIOR	2	P	6	8	7	21	21	50	50		1
2	12	11	r 34	TH. OF OPNS (EXCL. OPER. SUPPLIES)	2	P	14	15	15	40	42	75	75		2
3	2	2	6	OPERATIONAL SUPPLIES	0	P	3	9	0	10	15	20	10		3
4	4	3	10	ASSEMBLY, CONVERSION, MODIFICATION	0	P	3	4	4	10	15	25	25		4
5	2	1	4	OTHER (Civilian Supply)	0	P	2	2	0	0	0	0	0		5
6	27	26	r 75	TOTAL U.S. ARMY	7	P	28	38	26	81	93	170	160		6
7	4	5	13	NAVY	2	P	8	6	5	15	30	50	50		7
8	10	8	25	INTERNATIONAL AID	4	P	12	10	12	36	30	60	60		8
9	2	2	6	OTHER (Red Cross)	0	P	2	2	2	6	6	12	12		9
10	0	0	0	STOCK ADJUSTMENT - DECREASE		P									10
11	43	42	r 119	TOTAL ISSUES AND ISSUE DEMAND	[illegible]	P	50	56	43	138	179	292	282		11
						C	61	119	162	300	479	771	1,033		
				LEVELS											
12	25	25		EQUIPMENT RESERVE		EP	25	25	25	25	25	25	25		12
13	50	52		STOCK LEVEL BASIS 60 days		EP	54	46	47	52	48	45	45		13
14	0	0		PRODUCTION RESERVE		EP								0	14
15				TOTAL DEMAND (Lines 11-14)		C	142	190	234	377	532	821	1,103		15
				SUPPLY READY TO ISSUE (EXCL. PROC. & ASSEMBLY)											
16	[illegible]	[illegible]	42	STOCK ON HAND		P	27								16
17	[illegible]	1	5	RETURNED STOCK - SERVICEABLE WITHOUT REPAIR		P	[illegible]	1	3		8	8			17
18	2	4	8	RETURNED STOCK - AFTER REPAIR		P	4	3	4	12	12	24	24		18
19			0	OTHER		P								0	19
20		1	1	STOCK [illegible] - INC.		P									20
21			0	REDISTRIBUTION DISPOSAL		P									21
22	34	29	56	TOTAL SUPPLY READY FOR ISSUE (EXCL. PROC. & ASSEMBLY)		P	33	4	7	18	16	32	32		22
						C	33	37	44	62	78	110	142		
23				COMPUTED PROC. REQ. (EXCL. SUBS) (LINE 15-22)		C	109	153	190	315	454	711	961		23
24				DEMAND AS A SUBSTITUTE (ADD TO LINE 23)		C								0	24
25				SUPPLY FROM SUBSTITUTES (SUBTRACT FROM LINE 23)		C	-20	-30	-40	-40	-40	-40	-40		25
26				COMPUTED PROC. REQ. (ADJUSTED FOR SUBSTITUTES)		C	89	123	150	275	414	671	921		26
27	30	40	90	RECEIPTS FROM PROC. & ASSEMBLY		C	50	100	150	275	400	650	900		27
						P	50	50	50	125	125	250	250		
				SUPPLY BALANCE											
28				TOTAL SUPPLY LESS ISSUE DEMAND (22+25+27-11-24)		EP	40	48	72	77	59	49	49		28
29				TOTAL SUPPLY LESS TOTAL DEMAND (22+25+27-15-24)		EP	-39	-23	0	0	-14	-21	-21		29
				MEMORANDA											
30	25	16		TOTAL CURRENT UNFILLED DEMAND		BP									30
31	1	2	4	RETURNS OF REPAIRABLE SUPPLIES		P	4	4	4	8	4	4	4		31
32	40	50	120	PROCUREMENT DELIVERIES AND ON CONTRACT		P	50	50	45	100	25	0	0		32
33	50	50		PROCUREMENT SCHEDULE		P	50	50	45	100	125	250	250		33
34															34
35															35
36															36
37															37
38															38
39															39
40															40
41															41
42															42

AREA II - THE PAST

AREA III - THE PRESENT

AREA IV - THE FUTURE

SAMPLE FORM-NOT CLASSIFIED

AREA V - STOCK STATUS

LINE NO.			STOCK STATUS (AT END OF PERIOD)
43	30	[illegible]	[illegible]
44	4	5	OBLIGATED
45	[illegible]	[illegible]	NEAR AND [illegible] RESERVE
46	[illegible]	[illegible]	[illegible]
47	[illegible]	[illegible]	[illegible]
48	2	2	UNSERVICEABLE BUT REPAIRABLE
49	30	6	UNCLASSIFIED STOCK
50			AWAITING ASSEMBLY
51			OTHER ( )
52	[illegible]	[illegible]	TOTAL STOCK ON HAND
53			REDISTRIBUTION AND DISPOSAL COMPUTATION
54			[illegible]
55			[illegible]
56			AVAIL. FOR REDIST. & DISPOSAL
57			REQUIRED TO DISPOSAL AGENCY

AREA VI - DISPOSAL

RESERVED FOR HEADQUARTERS, ASF

AREA VII - ANNUAL DATA COMPARISONS

LINE NO.	FACTOR	1945 Reported As Of 31 Jan 45 (O)	28 Feb 45 (P)	31 Mar 45 (Q)	PROPOSED (R)	1946 Reported As Of 31 Jan 45 (S)	28 Feb 45 (T)	31 Mar 45 (U)	PROPOSED (V)	LINE NO.
58	TOTAL DEMAND	650	650	621		600	700	574		58
59	SUPPLY LESS DEMAND	0	[illegible]	[illegible]		[illegible]	[illegible]	-7		59
60	COMPUTED PROC. REQUIREMENT	490	500	504		500	490	507		60
61	PROCUREMENT OBJECTIVE	490	490	490		500	490	500		61
62	PROGRAMMED PROCUREMENT	490	490	490		500	500	500		62
63	EXT. PROC. AND ASSEMBLY	490	490	490		500	500	500		63

REPLACEMENT FACTORS: U.S. X / T.S. ; Z of 1 2 : ETO 8 : NTO 7 : SWP 6 : POA 6 : CHINA 8 : BURMA INDIA 8

REMARKS:

A - MINIMUM REQUIRED TO TERMINATE PROCUREMENT
F - ADVANCE PROCUREMENT AUTHORIZED
P - LIMITED BY PROCUREMENT CIRCUMSTANCES
Q - PRODUCTION RESERVE AUTHORIZED

P - PERIOD
C - CUMULATIVE
* - DATA NOT AVAILABLE

BP - BEGINNING OF PERIOD
EP - END OF PERIOD
r - REVISED

TECHNICAL SERVICE
Chemical Warfare Service

WD AGO Form 0470 REVISION OF 10 APRIL 1945

PAGE

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the preceding six months (or twelve months if he had good data that far back); he then corrected the information to eliminate nonrecurrent factors; he read the Supply Supplement, which was the interpretation of broad War Department policies to determine the general trend of supply activities; and he made a calculated guess as to the future supply position of the item and took supply action on this estimate. When the card turned up again in the next cyclical review he checked the accuracy of his prediction with the later performance records he had, and again made a correction. So, actually, the determination of supply action was a series of corrections and approximations.

The procedure was the same for all secondary items, major and miscellaneous, but the frequency of review differed. The major secondary items were reviewed once a month whereas the miscellaneous secondary items could be reviewed as infrequently as once a quarter.

I should point out in this connection that the methods of reporting differed between the secondary and the principal items. On each of the principal items we had this form (Chart "D"). For the secondary items our report came out in the form of dollar-value summaries, by category. In other words, the report by individual item was replaced by one which involved multiplying individual item data by unit cost, then adding all the dollar value data for items in one category together and coming out with a dollar-value summary. These were published in Monthly Progress Report No. 19.

Now the major difference in Staff Control of the secondary items, as opposed to the principal, came about from this dollar-value category system of reporting. In the case of principal items, the supply status of the item came up on one piece of paper to Headquarters, ASF. It could be reviewed as a single item; corrective action could be taken right there and put into effect.

That could not be done with the secondary items. The most that the dollar-value category report gave you was a thermometer which indicated that the patient had a fever. If the summary on the category seemed as a whole to be out of line and in an unsound position, you were unable to take corrective action immediately at Washington; you would have to go to the stock control point, get out the cards for that category, go through the cards, determine the items which were causing the trouble, and take the necessary corrective action at the stock control point. But while the degree of control of secondary items was less, as I shall demonstrate in a minute, the effect of errors made in supply action on secondary items was correspondingly less dangerous. This is best illustrated, I think, by an examination of my next chart, Coverage of the Army Service Forces Supply Control System.

(Referring to Chart E)

This chart gives a coverage of the Army Service Forces' Supply Control System as of 30 June 1945. Here we have our principal items, a little over 1800 in number and representing not more than two-tenths of one percent of the total number of items controlled by the system, yet they were so carefully selected that they represented, dollarwise 60 percent of all of our depot stocks and 76 percent of our predicted future issues. So, by getting very close control of them we had already taken care of three-fourths of our future issue problem.

When we took those principal items and added to them the major secondary items, some 40,000 in number, the two together gave us only five percent of the total number of items. These we had under a fairly close degree of control. By devoting most of our attention to the two groups just mentioned we exercised a very reasonable degree of control over more than 80 percent, dollar-wise, of our depot stocks and 93 percent of our expected future issues.

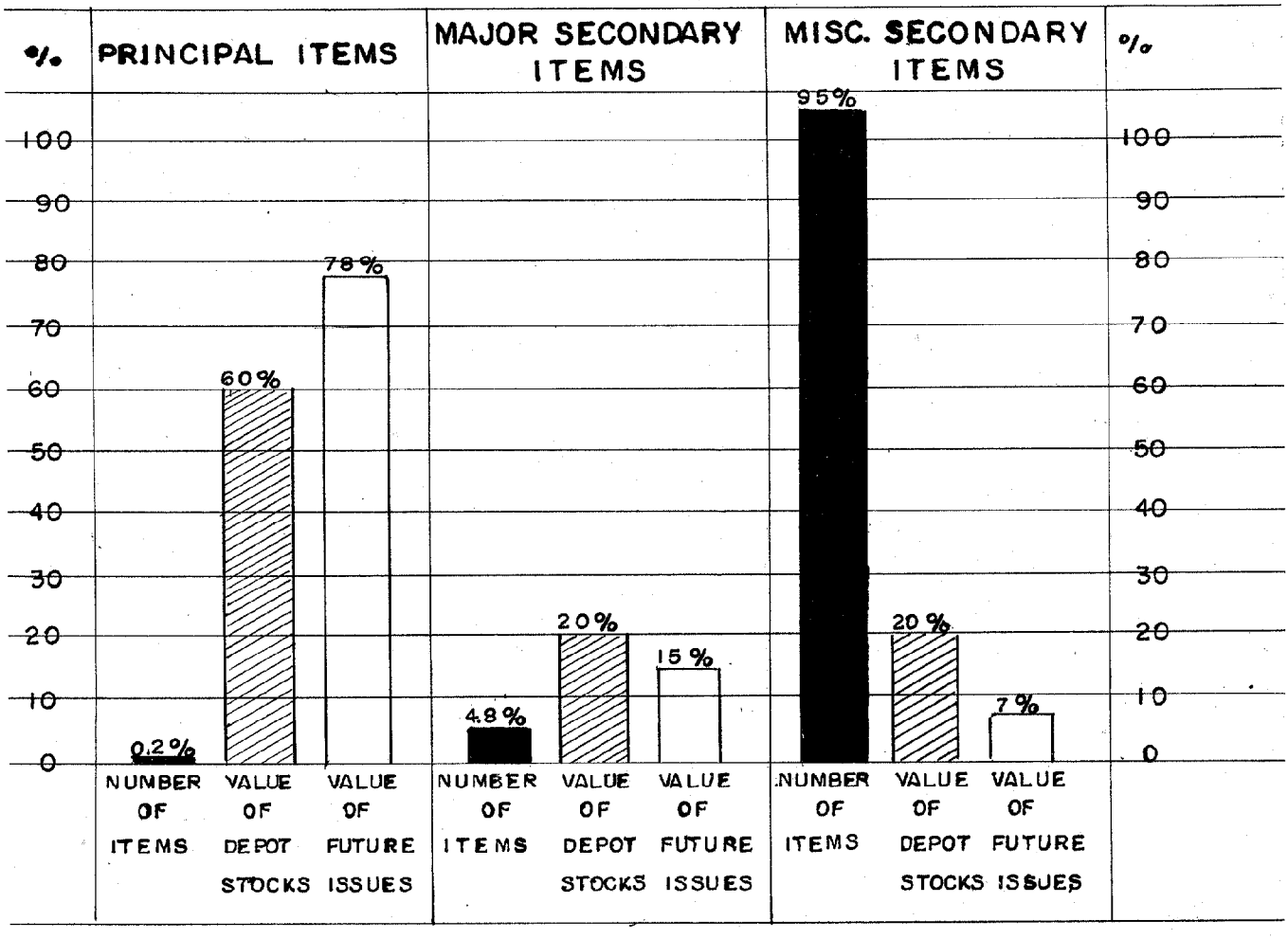
Finally, miscellaneous secondary items received a very small degree of control. They amounted to 95 percent of the total number of items, some 800,000. But they only represented 20 percent of the depot stocks (much of that was in obsolete items) and only seven percent of our future issue requirements.

This concludes the outline of the ASF Supply Control System as it existed on V-J day. It was not perfect. But the accuracy of control approached very closely to the accuracy of any planning data that was furnished. The control of most principal items had reached a very satisfactory state. But the control of secondary items--the dollar-value category system--had been evolved very late in the war and still had to undergo a great deal of perfection.

Earlier I took a little time to tell you about the involved supply activities upon which the Supply Control System had an effect. In other words, I told you what it could do. Now, if I may, I would like to tell you what it cannot do.

First of all, it cannot produce results more accurate than the data fed into it and this data must be firm and timely; otherwise, the Supply Control System loses its control function entirely and is relegated to that of holding a post-mortem on what went wrong. Of course, from your standpoint, the furnishing of planning data and assumptions, you will have to be hammering at your operational planners for, time and time again. When I came down to Washington this time, I was informed that the situation was normal: the troop basis was up in the air, as usual. You will always, in supply planning, have that difficulty. You will always find that furnishing the basic assumptions--the troop basis and the troop deployment--will lag behind the time you have to put in your orders to procure the items.

CHART E.



COVERAGE OF THE ASF SUPPLY CONTROL SYSTEM

30 JUNE 1945

47 6017

The Supply Control System can only furnish data on the overall supply position of an item. It cannot take into consideration local distributional failures. In other words, as I told you, our measuring base is the Zone of Interior depot system. We make every effort, by this phasing, to take into consideration the time required for the items to be distributed and issued here and in over-sea theatres, but still distributional failures will take place which are not measured by the system. That has been a frequent source of comment, by the using commands because they find that one cannot relate directly the supply control studies either to the material status reports or to the unit shortage reports.

Finally, the system is a control; it is not an operation. It merely measures the effect of supply actions and attempts to predict what supply actions should be taken, but it cannot itself produce one extra pair of combat boots or one extra truck. After all of these things I have enumerated have been taken into consideration, if a shortage does develop, there is little immediate remedial action that can be taken outside of substitution.

That is the system as it existed at the end of hostilities. With V-J day we had immediate and abrupt changes. The first things to hit us were changes in all our elements of supply and demand. In the field of the pipelines reversed and procurement was stopped on many items. In the field of demand our theaters reverted from a combat to a non-combat status and the demands fell off. Consequently, all of our computations changed very rapidly. That, of course, did not affect the system but merely the numerical results obtained from it.

On the other hand, we have introduced some changes. The first one is a step toward a more accurate reflection of some of our demands. This is known as the "Oversea Command Forcast of Requisitions." Obviously, it will be much more accurate if we can have the theaters complete their own demands than if we have someone in Washington, who is not familiar with local conditions, attempt to make this computation for them. So we introduced this Oversea Command Forecast of Requisition by which the overseas theater makes its own requirements computations and submits them quarterly to the War Department. These are submitted to ports of embarkation. Later on, if requisitions do not follow the predictions, the port of embarkation calls upon the theatre concerned for information relative to any large unexplained variations and transmits this information to the War Department.

The forecast system has not been in effect long enough to pass final judgement on its value. Theoretically, it should be good; but it is much more of a peacetime system than it is a wartime one. In time of war, particularly where you are activating a new theater, it would not be quickly responsive. It is better then for the War Department, knowing the latest plans, to make its estimates of theater needs than it is to transmit operational plans to the theater and have the theater make up its requirements and then report them back.

That was a step in the direction of greater accuracy. Now we find an opposing and more powerful factor which reduces quite possibly the

accuracy, and certainly the quickness of response, of the system. Like every other agency of the War Department, the Supply Control System has had to undergo very drastic budget cuts both in personnel and funds. To meet that we first reduced our requirements for the submission of data on miscellaneous items. Then we reduced the frequency of reporting for both secondary and principal items from monthly to quarterly. At the present time I understand there is a reporting procedure in the mill which will represent a further abbreviation. This will call for the suspension of the periodic publication of the Supply Control studies, MPR-20 (for principal items), in their entirety. In place of that, four copies of these studies will be submitted to the Director of Services, Supply, and Procurement. After review and approval the studies will be maintained in loose-leaf files in the technical services and in the directorate.

There will be brief one-line per-item reports of stock on hand, issues, surplus declarations, amounts in the surplus property account, disposal levels, and anticipated receipts, which will be published once a month to replace the old MPR-20. MPR-19 will be cut down to show only the dollar value of stock on hand, and the computed procurement requirements, but it will be supplemented by an item count on certain features, such as: the number of items in current short supply; the number of items for which the demands of civilian components cannot be met; and the number for which there is programmed procurement.

The reorganization of the War Department has not greatly changed the division of authority and responsibility relative to supply control. The directorate of Services, Supply, and Procurement performs both the function which was formerly assigned to G-4, namely, that of taking the troop basis and troop deployment emanating from OPD and translating it into a supply supplement; and also the functions of the Requirements Division, ASF, of issuing detailed instructions for computations and review, and approving the Supply Control studies. But these two functions, while they are both in S.S. & P. at the present time, are in two different branches of S.S. & P. The change, therefore, is more in name than it is in form.

Two other current problems are worth a brief discussion. The first one is our method for computing initial issue requirements. We have always assumed that once a unit was activated and had 100 percent of its initial issues the only future demand would be a replacement demand. At the present we have units considerably under authorized strength. These understrength units quite possibly will turn back some of their equipment to the depots. Then when the units again build up to full strength, we will have an entirely unpredictable demand hitting our depot system. At the same time our replacement demand is computed on a theoretical 100 percent usage of the equipment of these understrength units. If some of it has been turned back to the depots, we will not have that equipment being used and we will not have the computed replacement demand.

This whole problem is under study in the War Department at the present time and I think it is a very vital point that must be cleared up.

At the present time, of course, we have another factor which governs supply action. In war, our ability to meet demands depended primarily upon the productive capacity of the nation. Now it is controlled by the availability of funds. Consequently, with more demands than we have money to expend in meeting them, we need a priority allocation of the available funds. The final method of achieving that priority allocation has not been worked out in its entirety, but I hope whatever method is adopted will not diverge too far from a basic advantage of the Supply Control System, that of consolidating all pertinent supply data on one piece of paper.

Finally, I should like to go into the realm of what improvements are the best ones to make in this system in the future. In the first place, we can make considerable improvements in the determination of replacement factors and days of supply. Initial issues are very easily measurable because you have your Tables of Equipment and Authorized Allowances, but the rate at which that equipment wears out or is consumed (in the case of expendable items) is not easy to determine. That requires a great deal more study. The problem of establishing a sound policy involves an attempt to balance two divergent viewpoints: one is that individual items differ so much that it would be desirable to have a large number of different methods of determining replacement factors; the other is that, if there are too many divergent methods of computation, no one will be able to interpret the results (and the computer won't be able to interpret them himself) in terms of World War II experience.

A complicating feature in this study of replacement factors and days of supply is a very, very strong feeling held by many of the people concerned. If a commander of any large force has ever been embarrassed by supply shortages, he takes an extremely dim view of any effort to change the replacement factors and days of supply, except in one direction and that is upward. As we brought out a while back, the failure may not be due to over-all inadequacy of supply; it may have been a distributional feature that failed. In that case the way to be right is not to double the replacement factor. The resulting situation, would be just as bad as undersupply because in time of mobilization we tax the productive capacity of the nation to its limit. If we overstate our demands for one item, we are obviously going to lose our ability to meet the requirements of other ones, for which there are true demands.

Next, we might improve in the accuracy of our inventories. After all, there is only one truly measurable element that you can count at the depot level and that is what you have on hand.

Finally, there is a very vital field, that of cataloguing or item identification. I don't know how many millions of dollars would have

been saved by reducing duplication of procurement among the various technical services and between the Army and Navy, but I think you can all visualize it. In some of the studies we made, we found the same ordnance parts listed under as many as 32 different headings. The over 800,000 items we carried on V-J day in our Supply Control System could probably be reduced to approximately 225,000 if we knew what each item was and named it properly.

We had a very ambitious program for improving item identification just at the end of hostilities; then the Bureau of the Budget came along with its budget cuts. Some very nice work is still being done jointly by the medical services of the Army and Navy, but the Army program as a whole is in a status of suspended animation: I hope that some time in the future we will be able to put that back on a sound footing.

In concluding, I would just like to re-emphasize my main points. The first was that an accurate determination of requirements is vital to the success of any military supply program, because it defines the mission of so many of the basic supply operations.

The second was that the ASF system evolved in World War II successfully met the demands of that conflict and aided in the industrial demobilization following thereafter. It had under its control over 800,000 items. The basic features of the system were: the assignment of final responsibility for the determination of requirements to the chief of the technical service concerned; development of a reporting system which brought together all elements of demand and supply on one piece of paper, the use of the stock status in the Zone of Interior depot as a measuring base, and the adjustment of the refinement of supply control computation and of the supervision of supply action on an item, to the importance of the item.

The most important fields for improvement of the system, as far as I can see, lie in determination of replacement factors and institution of adequate item identification.

Basically, the system is sound and, if retained in anything approximating its present form, is capable of rapid expansion for meeting the needs of future mobilization.

That is all, gentlemen.

CAPTAIN WORTHINGTON:

Are there any questions?

A STUDENT:

Colonel Daley, will you enlarge on how the dollar-catagory items were grouped, to some extent?

COLONEL DALEY:

The question is how you made up the categories?

A STUDENT:

Yes, sir.

COLONEL DALEY:

Of course, the technical services always said we had the easy job of defining a mission; but, at the same time, they had the very difficult one of carrying it out.

We told them to put together all items of like supply characteristics. Obviously, you will have some particular items, we will say parts for one type of tank or for a type truck. You put all of those together. In a further break-down of that category you would have certain items which were sufficiently important to justify their being classified as major secondary. Those whose importance did not justify that, were carried in a parallel miscellaneous secondary category. Then you might look at the lead-time of the items. An item had to have about the same lead-time as another in the same category. We would not want to group an item which had 18 months lead-time in with an item that had only two weeks. Then we tried to group those similar items which had approximately the same authorized depot stock levels. The frequency of distribution and the balancing of the out-flows and in-flows of an item might require a 90-day level, we tried to group it with others whose stock level was 90 days or 75 days or 115 days.

A STUDENT:

How many categories were there? If you had some 800,000 items on your miscellaneous secondary items, into how many categories were those divided?

COLONEL DALEY:

I would have to guess, frankly, but I would say probably it must have run in the neighborhood of 500 or 600 different categories. I am just trying to guess by visualizing the size of the book that they came out in.

A STUDENT:

You mentioned replacement factors as being a great thing in stock control or supply control. Could you explain why the War Department General Staff refused to give overseas theaters distribution factors to match the supply within their depots. We had just as many depots overseas but no distribution factors. Therefore, we had to use an ulterior

motive, or other means to get that factor, giving us a rather high usage factor.

COLONEL DALEY:

No, I don't know why. I know that the approved replacement factors for the more important items were published in the Supply Bulletins.

A STUDENT:

There were no overseas distribution factors in my service, that I know of.

COLONEL DALEY:

I think there were. Take my sample form (Chart "D"). If you will look down, right here at the very bottom, you will find the replacement factors: one indicates the War Department-approved factors, and the technical-service-approved.

A STUDENT:

Colonel, I am talking about distribution factors, not replacement factors.

COLONEL DALEY:

I think I will have to "withdraw to a previously prepared position" due to the fact that I am not a distribution man.

A STUDENT:

However, you did bring out replacement factors.

COLONEL DALEY:

I know that we gave the theaters replacement factors to compute requirements. I thought I covered my flanks, rear, and front to great depth when I said supply control could not cover distributional failures. I am sorry I haven't got the information on distribution.

A STUDENT:

You realize the difficulty of the situation, though.

COLONEL DALEY:

We did furnish replacement factors. These were furnished in all of the major theaters. These approved Supply Control studies were on file

at theater headquarters. They were always available so the theater could tell what its predicted demand was, even in wartime.

A STUDENT:

The Supply Control plan was based, of course, mainly on dollar value. That was a rather new concept when we were accustomed to taking as good care of a penny item as one that cost $10,000.

It seems to me there is a certain danger in sticking to the dollar value in connection with the control of those items. Would you want to comment as to whether or not we could get along far easier with the dollar value?

COLONEL DALEY:

That is, I think, a calculated risk which must be taken. In other words, to make an item-by-item computation for all items in the system was beyond the realm of economic practicality. Just making such a study and then typing the study and publishing it would have involved an impossible burden on our administrative manpower. You simply could not afford to give a part to a rifle the same degree of treatment that you gave, say, to an M-26 tank. We did, in the case of principal items, conduct studies on an item-by-item basis. When it gets down to distribution at the depot and stock control point, you must have your item records. But, for exercising the staff supervision at the high level, to prevent people from going too far astray, you can only afford to put your emphasis on a few items.

A STUDENT:

MPR-19, when you phased it over a two month's period or six months' period, had cut-off dates. You reported an item on certain dates, in your normal stock reporting system from a depot to the stock control point. Now how do you take into consideration those items which only have, say, a month's usage because of cut-off dates? Do you follow me on that?

COLONEL DALEY:

I have everything except the last of it.

A STUDENT:

In other words, say that June 30 was the cut-off date for MPR-19. (You have it on a quarterly basis). Each day certain groups of material are reported to the stock control point. Now how do you take care of an item which is only reported for the last 30-day usage?

COLONEL DALEY:

The MPR would come out every quarter. We, if we were going to apply that system(as we did until we were caught short of money and personnel), would look at the place on the category report which gave the cut-off date for that particular category.

A STUDENT:

Yes, but in a situation where the supply and demand fluctuates, where there is only a 30-day requirement or 30-day issue, the best results are not obtained unless the supply control system is based on cut-off dates and reporting dates, the same date being used.

COLONEL DALEY:

The only difficulty which would come up would be when the results for one month were not properly indicative of the three-month period. Then you might get a query. For instance, we would query the technical service and say, "Your predicted issue for the next three months is $900,000 worth of this item. Last month you only issued $100,000. Multiplying that by three, (to get that data on a comparable basis,) we only get $300,000." Then the technical service depending on whether or not they considered it of urgent importance, would either telephone or write the stock control point for additional information. They might reply, "Yes, but the issues for two months before, which you haven't seen, averaged $400,000 a month." When there was important disagreement we would, some weekend, go out to the stock control point, sit down and go through the cards, item by item, in that category. We would go through their item cards to see whether there was a deviation that couldn't be explained. At least 50 percent of the time when we went out and examined, we found technical services right and our initial analysis was wrong.

A STUDENT:

Colonel, can you evaluate how accurate your inventories were?

COLONEL DALEY:

I can use a standard lecturer's expression, "it depended upon the situation". It varied from technical service to technical service and within the technical service. It depended a lot on the depot itself; a great deal. In this connection I will say the Quartermaster installations were extremely good.

A STUDENT:

The point I made, Colonel, was this: Were the inventories sufficiently inaccurate to give you a great deal of difficulty in operating this system?

COLONEL DALEY:

For a few items, yes they were.

So that I can stay close to home, the Engineers had a little difficulty from time to time in connection with what is known as the D-7 tractor. There were some remarkable swings in the requirements picture, in July and August just prior to V-J day, for D-7 tractors due to unsound inventory data. Now, of course, I want you clearly to understand that in all other items the Engineers were absolutely perfect.

A STUDENT:

Since I have my foot in the door, may I ask one more question: During the Fall of 1943 or the Spring of 1944, a frenzy developed in the War Department to cut back surpluses where they thought they had bought too much. Maybe they had in a few cases but generally speaking, with a major European war coming up, I always thought they were a little premature. But, any way, they set up a lot of rules whereby if you had more than a certain level of an item you would go out and sell that item. Now was that policy continued until the end of the war?

COLONEL DALEY:

Yes it was. The policy was (I can state it best this way) that the disposal level at that time for items of civilian use, application or utility allow you to retain your operating stock level(that is, your 60 to 90 days' stock level) plus 12 months future issue demand, which gave you 14 or 15 months predicted future issue demand.

The reason for that disposal policy of course, was that, as you gentlemen at the level at which you are studying have to realize, in fighting a war you are fighting it with the nation as a whole, and not with the Armed Forces. We had depleted, in many items, the entire resources of the Nation. Consequently, it profited us little (except from an internal economic standpoint, from a purely monetary standpoint), to have sufficient stock to equip the Army for two or three years in the future if the civilian economy was unable to continue its production due to a lack of these elements. That was the theory behind the disposal policy and that was the basis on which it was approached. It was carried out until a little beyond V-J day.

A STUDENT:

Colonel, what about barbed-wire, 90-mm. guns, and landing mats?

COLONEL DALEY:

With the 90 mm. guns, as for other so called "military type" items, the disposal level was two years of issue demand plus depot stock level.

After all, this was just a general rule and if the technical service concerned felt it was unsound for any particular item it could ask for an exception on that item.

A STUDENT:

In selecting your principal items and your major secondary items, wasn't it the case often that the secondary item would become a principal item, and so on?

COLONEL DALEY:

It would have become the case had the system continued longer. The dollar-value category was a very late development. Actually, the first really good MPR-19 was issued on 30 June 1945. When we had just reached the peak and started going into full-scale operation of investigating miscellaneous and major secondary items, we had to change. The change from principal item to secondary is primarily due to the obsoletion of a military item. A gun which was a principal item last year and was then replaced by an improved gun is immediately relegated down to the miscellaneous secondary category if it has no demand as a substitute.

A STUDENT:

Who determined the principal items?

COLONEL DALEY:

The recommendation was made by the chiefs of the technical services. The approval of the recommendation was made in the Requirements and Stock Control Division.

A STUDENT:

In connection with dollar-value reports, General Lutes, in a talk here yesterday, made it a specific point to emphasize the lack of value of dollar statistics. I do not know that he has reference to this sort of thing, but what use was made of the dollar reports of the secondary items?

COLONEL DALEY:

As I said, the concept of it was that it would be a thermometer. In other words, it was impossible to get much beyond our 1800 principal items for the ASF Staff sections to exercise detailed staff supervision over the items. For the rest you could either go out in the field and, in this realm of 800,000 and 40,000 items, select items at random and try to develop better supply policies; or you could adopt some method which would give you an indication of the area in which you should search for large

errors. That was the purpose. That was its sole purpose.

A STUDENT:

Can the system be by-passed where the procurement of items may cause critical shortages?

COLONEL DALEY:

The system would not be by-passed, but the system was adaptable to it. In other words, even with this system there were continuous studies being made on items of vital importance. It was perfectly possible, after all these theoretical computations had been arrived at, and someone had made a command decision or a staff determination, that the figures arrived at were inadequate, to approve an increase in the programmed procurement or the computed procurement requirement. You could always do that if you had reason to doubt the validity of the figures. But this gave you a normal procedure for the general run of items and enabled you to spend more time in picking up those flaws in the particular items that were giving you trouble.

A STUDENT:

The Overseas Command Forecast of Requisitions, as I understand it, is an excellent means of reporting short-term requirements to the War Department. What about the other situation where there is four years supply of stock on hand in the overseas theater? How does the War Department correlate that information with the requirements side for the fiscal year 1946?

COLONEL DALEY:

In my conception of it- I think I am correct- the Theater Forecast of Requisitions was modified, after its initial issue, to provide one additional column in which the theater entered its requirements through 30 June 1949. (I believe, that was the period.) It was very important to consider that theaters which had a surplus might have no procurement requirements at all for a considerable period. You would want to know that negative information.

A STUDENT:

Where our supply was obtained from the Navy or from another service out in the field, how did that tie in with your Supply Control System?

COLONEL DALEY:

As I recollect, we would not have a very good picture of the effects of that. Probably that was more or less of a defect in the system. If

we had taken it into consideration, it would have had to be phased into the Supply Control System because of distributional requirements. Supply from such a source was not so widespread that it affected everything but we would have to take special cognizance if we knew of such a case. In other words, we would have to reduce computed requirements and replacement factors by whatever we expected them to be. Our Theater Forecast of Requisitions, if that were in effect, would take that into cognizance. The theater now takes into consideration not only its existing assets but what it can obtain from the Navy and also what it can get locally.

CAPTAIN WORTHINGTON:

Thank you, Colonel Daley, for a very fine talk on this difficult subject.

(Oct. 29, 1946--200)L